



El & Fry Ltd

SIR OLIVER LODGE

LETTERS FROM SIR OLIVER LODGE^E

Psychical, Religious, Scientific and Personal

With a Foreword by Sir Oliver

Compiled and Annotated by

J ARTHUR HILL

Author of "Psychical Science and
Religious Belief," etc.

With four Plates



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PREFACE

THE letters in this volume have been selected from a collection of about two thousand which I received from Sir Oliver Lodge during a period of something over twenty years. My association with him has been mainly on the side of psychical research, and consequently this subject figures largely in the letters; but many other subjects were discussed between us, and Sir Oliver said many interesting things about religion, literature, politics, and even music. It is hoped that this volume may serve as a sort of appendix to Sir Oliver's autobiography, which was published in November, 1931 under the title "Past Years." Letters can give an exact presentation of the writer's mind on this or that subject at the time of writing, and they will show aspects of his character which are not likely to appear in what he writes about himself; generosity, kindness, and other good qualities of which he is perhaps unconscious.

The chapter headings are intended to give an idea of the principal contents, but they do not constitute a full index; this will be found at the end of the volume. In the letters, I have omitted the conventional beginning and ending; these at first were the usual formalities, but were presently dropped in favour of a "Dear J. A. H." and "O. J. L." to finish with.

Sir Oliver kindly permits the publication of these letters, but I have made the selection independently and without consulting him, so the responsibility for the selection and for the annotations is entirely mine.

J. A. H.

THORNTON,
BRADFORD.

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FOREWORD

By SIR OLIVER LODGE

MY good friend Mr. J. Arthur Hill, of Bradford, Yorkshire, kindly offered to help me with my psychic correspondence a quarter of a century ago, when it was beginning to be heavy : and since then he has been good enough to act as a sort of amateur private secretary, so that we have corresponded freely on many subjects. He tells me that he has now made a selection of my letters to him, and proposes to publish them as an appendix or sequel to my Autobiography, since he thinks they will be of interest to those who have any desire to know more of my personality.

Mr. Hill has given me sound estimates of books and papers submitted to him, and has often corrected my own errors and slips of the pen. We have co-operated for many years, and I am grateful to him for his highly intelligent and educated assistance.

Without being a specialist in any of the physical sciences, he has an adequate general acquaintance with scientific method and results. He has read widely in philosophy, and, starting from something like the position of Spencer and Huxley, but finding kinship with G. T. Fechner, Bergson, William James, and Emerson, he has gradually come, mainly by pressure

FOREWORD

of psychical evidence, to conclusions very similar to my own. He is an honorary Associate and member of Council of the Society for Psychical Research, has done much personal investigation, and has written several books which are notable contributions to the literature of this new branch of science. He takes all responsibility for this book, and I hope he will find that it fulfils the purpose for which it is designed.

OLIVER LODGE.

LETTERS FROM SIR OLIVER LODGE

CHAPTER I

25 January, 1909—29 September, 1911

Beginning of Correspondence—Proof-reading—Psychical Research—Reprint of "Life and Matter"—"The Survival of Man"—Telepathy—Religious Orthodoxy—Incarnation—Automatic Writing—Conditions after Death—Interviews—Holiday in Italy—Cranks—Direct Writing—Vibrations—Well-meaning but Uninstructive Books.

MY correspondence with Sir Oliver Lodge began in 1906. He was at that time Principal of the University of Birmingham. I had just become a member of the Society for Psychical Research, of which Sir Oliver was a past President and a member of Council; and I was conducting experiments which I was anxious to make as scientific as possible. In particular I was wishful to deposit with some responsible person a statement of what I was doing, before any results were obtained, so that there could be no suspicion of any falsification or trimming of the record to fit the facts. Sir Oliver replied encouragingly, and kindly accepted deposition of the documents.

During the next year or two an occasional letter passed between us, mainly on matters of psychical research. I was invalided by a heart-wrench caused by over-athletics

—though partly due to something else, as will be seen later on—and had plenty of time for reading and writing. I found myself in closer agreement with Sir Oliver than with any other writer on the subjects to which I was most interested, and in 1909 I asked him whether I could be of any use in proof reading or the like. The following letter was his reply. The Newcomb mentioned is Professor Simon Newcomb, the distinguished astronomer, who also was interested in psychical research and at one time was President of the American Society. There is always some difference of opinion among investigators as to interpretations of phenomena, in all objective sciences. Some such difference apparently existed between Professor Newcomb and Sir Oliver, and it is largely through such discussion that advance is made.

25 January, 1909

I thank you cordially for your kind offer of assistance from time to time in connexion with psychical proofs and such like. I am always glad of criticism, especially when it occurs in time for amendment.

My reply to Newcomb will appear in the February number of *The Nineteenth Century*. The Editor sent a copy to me on January 1st, asking me to reply, and I made a rough draft of the reply that same evening. Since then I have been at intervals polishing it, and it has now finally gone off, but I happen to have by me a duplicate copy of its final form, and that I will enclose to you, since it may be of interest, and since there may *possibly* be time to introduce an additional correction if you notice the need for one.

There is certainly a considerable amount of attention being given to the subject just now. I hope it is wholesome.

I have been making a long report of my recent

experience with Mrs. Piper, prefixing to it an account of some experiences of rather older date. I have this now in proof form. It is of course quite confidential, but it is not likely to be published for another month—perhaps not before Easter—so I will cause a copy to be sent to you in case you like to make suggestions for its amendment; and in this case there is no particular hurry.

27 January, 1909

Thank you for the return of the Newcomb article. I am glad you detected nothing particular to find fault with in it.

The Piper Report was sent off last night, but, as I said before, there is no hurry about it whatever.

A matter which is perhaps rather more urgent is a sixpenny edition of "Life and Matter,"¹ which Williams & Norgate have agreed to produce, and of which the proofs are just beginning to come in. I have these proofs in duplicate and I propose to retain one copy and to send the other copy to you; sending also at the same time the original material from which they have been made up, which consists mostly of the old book, thus taking advantage of your kind offer, both to see whether the printing has been done correctly and to make suggestions for its emendation here and there; which is most conveniently done by scribbling on the proof in pencil (or ink for that matter, since I have a duplicate) and ultimately returning it to me. But I will ask you not to return it until the book is complete, but for the present simply to retain it.

¹ A reply, from the point of view of a physicist, to "The Riddle of the Universe," by Professor Ernst Haeckel, the distinguished biologist.

I will send the batches as they come along, since it is probably easier than getting too much at once.

Sir Oliver realized that the publication of his book, "The Survival of Man," would result in much correspondence with strangers, and accordingly he asked if I could help with it.

19 October, 1909

When my new book appears I perceive that I shall be flooded with correspondence, some of which will be rubbish but in which there may be grains among the chaff.

I do not like leaving letters unanswered, but I shall not have time to sift them or reply to all, and it has occurred to me that perhaps you might be willing to deal with this correspondence as it trickles in, if I send the letters on to you unread; on the understanding that concerning anything of real value or importance I shall be informed or the letter returned, while the bulk of it can be dealt with solely by yourself.

In that case it might be well if I drew up a sort of authorization or short printed statement explaining why you answer the letter instead of myself.

There is no hurry about the matter, since the book will not be out for a month, but I take this opportunity of ascertaining whether you regard the prospect favourably or the reverse.

I was, of course, very glad to collaborate in the way suggested, and Sir Oliver supplied me with printed leaflets as proposed. From this time I gradually became, as Sir Oliver says of me in "Past Years," page 268, a sort of amateur private secretary. Being well acquainted with his views and with his books, I could usually reply adequately to inquiries on psychical subjects; in particular I had read rather widely in this direction—I had notes of about five

hundred psychical books which I had read in the preceding five years—and could direct new comers into what seemed to me the right way. Much time can be wasted in reading the plentiful rubbish which exists in this field of literature. It is best to keep for the most part to the Proceedings of the Society for Psychical Research, or—if one has not time for such numerous and bulky volumes—to the books of such writers as Lodge, Barrett, and Myers, which give a good idea of the contents of the Proceedings.

In addition to correspondence, I read the proofs of all Sir Oliver's books for the next twenty years or more. In the case of "The Ether of Space," "Atoms and Rays," and some others, I had to warn him that the mathematical part was beyond me, and that I was no good at correcting proofs of that kind. But I could help a little sometimes on the literary or philosophic side, and could say how I thought the book or article would strike the reading public.

The following letter was sent to a lady who had made inquiries about telepathy. Sir Oliver sent me a copy of his reply, as he often did in such cases, it indicates his attitude to the evidence for telepathy, and the way in which he took time and trouble to inform people of what was necessary to bring such things to book in a scientific way.

19 November, 1909

I note that you are in telepathic communication with another person, but unless the facts are put in writing, and a record kept, no one can make use of them. A verbal statement to me would be waste of time. The only thing I could do would be to urge both you and your friend to keep an independent record and submit them to a third person for subsequent collation. That is the way to make the thing of scientific value . . . If, as I gather, you are going to Australia soon, you have a great opportunity of doing a service to knowledge by

keeping independent records when separated by approximately the diameter of the earth, and arranging so that there can be no sort of suspicion of their having been tampered with to make them correspond.

If you read the paper by Miss Miles and Miss Ramsden in the "Proceedings" of the Society for Psychical Research, vol. 21, it will give you an idea of the procedure in that case.

The next letter alleges Sir Oliver's approach to orthodoxy, but inasmuch as no two people will be able to agree as to what Christian orthodoxy is, it perhaps does not tell us much. Sir Oliver might have been called orthodox by Broad Church clergymen such as Farrar and Wilberforce, or by the Bishop of Birmingham (Dr. Barnes), but hardly by a typical Anglo-Catholic or Evangelical.

24 December, 1909

Best Christmas wishes to you.

There are some letters which I may be sending on which are not really suitable. If so, it means that I have not read them or not stayed to think about them. But I only write to say that you will not feel bound to answer any that you do not like or do not find suitable. Some people try to raise a theological discussion, for instance. Usually they do not understand my position. There is no particular reason why they should, as full information is not yet available. I shall be publishing more in that direction before long. I have done a thing on the Incarnation—or rather on incarnation in general—now, but I do not know when or where it will appear.

I send this merely for your information in case you find it useful in making any replies. I believe that I am more essentially orthodox than people think.

The "thing on the Incarnation" was an article which was expanded into the first Part of the book "Reason and Belief," published in September, 1910. Sir Oliver was about this period particularly concerned to reconcile Science and Religion. He had just published—in 1908—his book "Man and the Universe," and was all the time trying to look at both man and the universe from a middle point at which true Science and true Religion should touch and harmonize. Hence perhaps his remark about his orthodoxy. He was feeling that he could accept the fundamentals of Christianity, though rejecting some of the specific doctrines such as the resurrection of the physical body, an everlasting Hell, the cruder forms of the Atonement, and so on.

As just indicated, Sir Oliver believed himself to be more orthodox than people thought, but he distrusted priests when they dealt with matters of science. A lady wrote to him saying that she had consulted a Roman Catholic priest on the subject of Automatic Writing, and he had told her that such things were of the Devil and that people who did automatic writing always suffered from paralysis of the hand and arm that did the writing. She asked Sir Oliver's opinion, and he sent me a copy of his reply.

7 February, 1910

Dear Madam,

I have no reason at all to suppose that any ill results follow from Automatic Writing. One lady who has recently developed the power has suffered from writer's cramp, but she suffered from this complaint before the automatic writing began. I do not myself attach any scientific importance to what is said by priests. Their duty is to admit the fact and to discourage the practice of all these things. And in many unbalanced cases the prohibition is doubtless wise. They are the best judges of what is good for their flock, but they seem to me too much

acting under central orders to make their testimony valuable

The next letter, or rather extract from a copy of a letter, to a correspondent, shows that Sir Oliver did not accept the doctrine that our state is fixed for ever at death, eternal weal or woe

1 March, 1910

I do not think it at all likely that people when they die, immediately rise into a high condition, in which no one would recognize them, or that they attain at once visions and privileges for which they may still have to qualify through the equivalent of many centuries of progress

The book "The Survival of Man" (published in 1909) brought Sir Oliver a great deal of correspondence from strangers, and I dealt with a large proportion of it. Many of the writers desired personal interviews, and sometimes this was a difficult matter to decide. The next letter to me is a typical illustration of Sir Oliver's kindheartedness, he was always wishful to help anyone who might want instruction or comfort, even though his correspondent was a complete stranger with no claim on him—and of course this was usually the case. We are dealing with a pre War period, as will be noted, when the War came and bereavement became widespread, Sir Oliver employed an extra secretary to help people who, as I have said, had no claim on him for any reply to their letters

15 March, 1910

When people want interviews in an inconsiderate manner they are seldom any good, but when people want considerate interviews it is very difficult to decide how to meet them. Sometimes they have evidence to give, or think they have, in which case one does not want to choke them off. I have some

times referred them to Miss Newton, the Secretary of the S.P.R.,¹ who is sympathetic, sometimes to Miss Miles,² sometimes to Dr. Abraham Wallace, and sometimes to my late assistant, Mr. Benjamin Davies. Occasionally I have consented to see them—for instance in the case of American visitors—and they have come here; but generally in such cases there has been some sort of introduction from the American side.

I think they ought to be able to give an indication of what they have to say or what their reason for seeking the interview is, and I should imagine that your method of dealing with them is probably as nearly right as can be managed under the circumstances.

There is sure to be a great mass of chaff to a very little grain, but there are cases when one can give useful advice or assistance, or be of some comfort, without attaining anything that is of use to Science. In fact this last alternative must always be exceptional and rare. If we get anything of that sort once in five years we may be content.

I am anxious not to kill off rational interest. Myers was very sympathetic to all sorts of cases, and took a great deal of trouble about them—going to see people and staying with them and generally behaving in a way which I should find quite impossible.

I am going abroad on Saturday the 10th, and expect to be away four weeks.

Sir Oliver's holiday was spent at Rezzola, Italy, with friends who lived there. He took no secretary with him, and did very little letter-writing, though—as always on

¹ Society for Psychical Research.

² An S.P.R. member who had made many experiments in Telepathy, etc.

ostensible holidays—he did a certain amount of writing for his next book.

The subject of psychical research unfortunately attracts cranks and people who have any sort of exceptional experience, and some of these must be reckoned mentally ill. A good many correspondents were afflicted with various sorts of obsession, and in some cases I thought it best not to reply, the desirable thing being that the sufferer should be able to forget his troubles as much as possible, while any reply from me, on Sir Oliver's behalf, would lead the correspondent to dwell on his ailment. I felt a little concerned, however, lest these people should complain to Sir Oliver about getting no reply; in which case he might think I was neglecting them. So I wrote and explained to him why I did not always reply to such people. His answer was:

I am very familiar with the lunatics who think they are obsessed by somebody or other. Do not give yourself the least anxiety as to my jumping to any unfair conclusions on their account . . .

The phenomenon of "direct writing"—writing produced in some not understood way, but without the action of anyone in the room—is a rare one; Sir William Crookes obtained it in the presence of D. D. Home, but I think Sir Oliver has not said much about it in print. However, he did observe the phenomenon on one or two occasions.

18 June, 1910

This is to let you know as a matter of interest that a Mrs. Herbine of Chicago has called on me and has shown me the occurrence of direct writing under circumstances which preclude trickery.

The messages obtained were of no particular importance, but they were obtained without apparent muscular action as physical phenomena.

15 July, 1910

Thank you for your review of Heysinger's book in this week's *Nature*. I have not seen it myself, and am glad that you can regard it so favourably. I had fancied that he would be a crank, but I have no reason for the suspicion. I suppose it is not a book that there is any need for me to look at. It is a good thing to get a review of that sort into *Nature*. It is remarkable how the attitude of people is improving.

I have had another interview with Mrs. Herbine—no more evidential than before, but also no less—so that my opinion concerning her "phenomena" (both the physical ones and the abnormal means of obtaining information) continues favourable.

There is a tendency on the part of some writers to "explain" anything that is not understood, by an easy reference either to "vibrations" or to the *Fourth Dimension*. An author of this kind sent a copy of his book to Sir Oliver, who replied and sent me a copy of his reply. It is useful to see how these speculations are regarded by a physicist and mathematician.

26 September, 1911

I see that you are impressed, as I am, with the magnitude and complexity of the Universe as well as with its beauty and order. But I see also that you take what I call a materialistic view of psychical processes, attributing Telepathy, for instance, to vibrations, and in fact that you emphasize vibrations a good deal. I find myself unable to agree with you in that, though naturally that does not in the slightest degree prove that you are wrong. You also find it helpful to emphasize a fourth dimension, not only as a conception but also as a practical reality. I have

had vague ideas of this kind, but have never been able to formulate anything definite, though I have endeavoured to show how the conception throws some illumination upon the nature of Time.

You have perhaps read the works of the great French philosopher, Bergson. If not, I think you will like to do so.

One of Sir Oliver's notable characteristics is a genial tolerance of views which he does not accept. Perhaps he would not claim that he suffers fools gladly, in conversation; he has always been a busy man, and anyone who suffers fools gladly will have much to suffer; interviewers and bores have sometimes to be discouraged. But in the case of books he always takes hold of them by their best handle, so to speak, seeing in them all the good there is, and not dwelling on the weaknesses. The next letter refers to a book which he had sent me to "smell," as his phrase was; a New Thought book by an American writer.

29 September, 1911

You have been very prompt in returning the book. It is, as you say, one of a great number of books that emanate partly from this country but mostly from America. They are of interest as a sign of the times. The point that I notice about them is the extraordinary amount of good feeling and longing for something better—longing indeed for something quite lofty. They show but little brains and no learning, but they are full of possibly wholesome emotion . . . I often think that the production of a careful book indicates great faith in the ability and industry of those who receive it, also in their willingness to learn; and there must be a great amount of earnestness in order to put things into practice. Unless things are put into practice by somebody, we are only beating the air.

I quite agree with your feeling about this class of literature in itself.

I am afraid I am sometimes rather impatient of such books, and I think Sir Oliver was giving me a mild and disguised rebuke in the foregoing. Or perhaps he was merely expressing his own ideas, and I put the cap on because it did undoubtedly fit. I recognize that it is the right thing to see the good in everything, and not to be superior or impatient. The difficulty is to live up to what we recognize as the right thing!

CHAPTER II

4 October, 1911—12 February, 1914

Psychical Progress should be slow—Materialism—Pseudo-spiritistic or Subliminal Writing—East and West—Rabindranath Tagore—British Association at Birmingham—Begging Letters—Visit to Australia—Slang—Cross-Correspondences—Hell.

I INCLUDE the next letter because it illustrates the quiet sagacity and patience of a mind which perceives that it may not be well to stimulate interest, even though the subject may seem important and the implications momentous. Sir Oliver, knowing the history of science and of human progress, realizes that permanent advance is usually slow, and that it is possible to try to go too fast, even in a direction which seems right. Forcing the pace might lead to mistakes, or to exhaustion of interest, instead of the careful and steadily-maintained advance which is desirable.

4 October, 1911

Dent, the publisher, has been sending me two little books by Lowes Dickinson and asking me if I would write a little shilling book on the essence and meaning of Psychical Research.

I have replied that there are a good many small books on the subject already, and one recently by you, and that I do not think it is an appropriate time to add to the number or to try and further stimulate popular interest in so growing a subject just at present.

4 OCTOBER, 1911—12 FEBRUARY, 1914

I could of course refer him to you, but I conceive that you have already delivered yourself and do not want to be bothered again yet awhile.

I include the next letter—which was sent to a bereaved correspondent, a copy coming to me in the usual way—because of its definite statement of belief in survival and communication. It was said later on, by opponents of psychical research, that Sir Oliver's beliefs were influenced by the death of his son Raymond, in 1915 : that his belief, in short, was due to grief and emotional need. As a matter of fact, he had reached full conviction long before the War; the following letter was written in 1912, and he had stated his convictions in "The Survival of Man," published in 1909.

6 May, 1912

I recognize the right of one who is bereaved to seek information, and I will send your letter on to a confidential friend who has experience in these matters.

Meanwhile I can say for myself that, without accepting all the tenets of the people who call themselves Spiritualists, I am convinced of human survival and the persistence of personality; and I have (I consider) ascertained that under certain exceptional conditions, and with considerable difficulty, communication is occasionally possible.

Having been brought up on Huxley and Tyndall, I rather inclined to a materialistic way of looking at things, and in a letter to Sir Oliver I had argued that life is the result of molecular complication; that vitality is a name for properties, like aquosity, and so on. His reply did not fully convince me that I was wrong, but I now think that it went deeper than I realized. Sir Oliver's limpid style often makes readers think that it is simple when it is not; clearness is not always shallowness, though it sometimes suggests it.

27 July, 1912

Many of the biologists would be in agreement with what you say about Life. The materialists strongly hold that it is merely a name for properties acquired by matter when the molecules have become sufficiently complex. I am unable to agree, but it is a legitimate controversy and I hope that you will write the paper you contemplate. If you have not got a copy of my "Life and Matter" I will send one. The 6d edition is most complete and has a glossary that may arouse your critical interest.

I have tried to use the term "vitality" to signify the interaction between matter and the thing which I suppose to exist and which I call "Life". Certainly, as we know it, vitality is an interaction or a relation—a function, one may say, of organized matter—but I think of it (whether rightly or wrongly) as an interaction or relation between two real things—matter and something else. Spirit, some might call it, but of course one has to provide for not only the lower animals but plants also. All I insist upon, about life, is that it is not a form of energy, and that it is a guiding principle, but what it is in itself, and whether it has any existence apart from matter, is just the point of controversy, wherein I am interested to see you take the side of the materialists. I hope you will develop that, for it wants developing if it is to hold its ground.

I have just been reading a book called "Modern Science and the Illusions of Professor Bergson," by a man called Hugh S. R. Elliott, with a Preface by Ray Lankester. It is a most dogmatic book, and utterly unfair, but rather well written. You may be able to sympathize with it more than I do. Anyhow I will lend it you if you care to see it.

Materialism is also cropping up anew and in full vigour in a quarterly journal called *Bedrock*, of which only two parts are out—April and July. They both have attacks on S.P.R. work—the July number on “Psychical Researchers and the Will to Believe” by Ivor Tuckett, the author of a book on “The Evidence for the Supernatural,” which is a kind of Podmore and water. The article in *Bedrock* I am replying to. I suppose my reply will appear in October.

When I go North (which I do at the beginning of next month) I can lend you any of these that you care to see.

The next letter was written to a correspondent—a retired schoolmaster—who had received automatic messages by what is known as the “*pendule explorateur*.” That is, one holds any sort of pendulum, usually a ring suspended from the finger by a thread, over a circle of the letters of the alphabet. Without conscious guidance, the pendulum will, when operated by some people, swing towards different letters, and, these being noted down, an intelligible message sometimes results. In the case in question, the messages were in my opinion taken too seriously; the whole thing seemed probably subliminal, like dreams. I reported to Sir Oliver accordingly. He sent me the following copy of his letter. The automatist was an elderly man and is now dead.

13 September, 1912

My friend Mr. Hill has been through the whole of the material you have been good enough to send him, and has reported to me on the subject.

I think that on the whole it will be best now for me to send the whole of the material back to you for safe custody, including such letters as contain explanatory matter. The phenomenon is a very curious one,

and a complete explanation is not yet in my judgment forthcoming.

I think it most probable that the bulk of it is due to what we call subliminal activity, namely the subconscious or dream part of the mind; but I also think that this subconscious portion is open to psychic influences from outside, more than the normal or conscious part, and that it can be the receptacle of inspiration or telepathic communication. But whether in any given case this possibility is made use of, and whether the subliminal is dominated by higher influences, or on the other hand is left to its own unaided activity, is a question to be decided from the content of the messages; and I conjecture that with the same individual the proportion of the two ingredients varies at different times.

On the whole I am inclined to think that for the most part your own dream activity is responsible for most of these utterances. But in that you will probably differ from me, and I by no means wish to dogmatize on the subject.

Automatic writing is only another variety of the same general characteristics, and I have known people who possess this power sometimes get communications of importance in the midst of a great mass of what may be attributed merely to their own subconsciousness.

Hence I think it desirable to encourage people possessing this power to retain and file their script, in the hope that it may develop into something serviceable and evidential.

So far as I have been able to ascertain, the greater part of your automatisms are not of an evidential character, but it by no means follows that evidential things shall not occur among them.

I understand that you would like me to come and see the pendulum at work; but I am so extremely busy that I can hold out no prospect of that sort, and besides I do not think it would serve any useful purpose. I entirely accept your statements concerning the mode in which these things arrive. Such methods are by no means unfamiliar, and the main question is not as to the manner, but as to the matter of the material so obtained.

I think you must be content to realize that the bulk of it is, as usual, worthless; just as dreams are for the most part worthless, though occasionally they exhibit distinct clairvoyance and can be used as a vehicle for higher intelligence. So it is with subliminal activities generally.

Most public men are worried at times with requests for autographs. Sir Oliver has always been wishful to do any little kindness that lay in his power, but there are limits; the next letter gives his views on the autograph collector.

26 April, 1913

I often tear up autograph requests; occasionally I give way to them; but there seems to be a regular business of it. I have not intended to send mere autograph requests to you, but no doubt they occasionally get through because I often do not read the letters that I pass on. If ever you feel inclined to send one, I am sure that it would be right to do so. What they probably want is a letter, but if they are satisfied with a mere signature I could sign some bits of paper, or you could cut off signatures in the way you suggest. I have no objection whatever to writing a letter to people who are genuinely interested, but I do object to the trading in autographs, and also to a lot of thoughtless schoolboys and other such people

who make a fad of it, as they do of postage stamps, and who try to consume the time of busy people by their stupid thoughtlessness. There is a kind of thoughtlessness which is rather akin to viciousness. Ladies' hats in a front row belong to this category, and I expect there is a Hell of some kind awaiting people of that sort, for on this planet they seem to have "all the times of it"

The old Greeks had a maxim, "Nothing to extremes". Sir Oliver is of the same temper, he sees that there is something to be said on many sides of every question, and that we can always learn something from a study of the views of other people. It was accordingly natural that he should desire more understanding between East and West, as indicated in the next letter. Here I should remark explanatorily that a friend had told Sir Oliver that Rabindranath Tagore, the distinguished Indian poet, had expressed a wish to meet him.

1 August, 1913

I thank you for the report you have sent me on a rubbishy looking Indian book called "The Inner Man". I should not have known that it had any value without your report. I will send a reply to the sender as you suggest.

There is a considerable underground movement going on towards a union of East and West. I am enclosing you a copy of a poem (if it can be called a poem) which, though of no literary importance, yet shows a sympathetic feeling which I appreciated. I went up to London the other day, and, having half an hour to spare, I went to see Tagore. I found him in a very simple clean white room, high up over the Thames, in Chelsea, in a set of flats called "More's Gardens," being the site, apparently, of the old garden

of Sir Thomas More. He seemed weak and fragile, but highly cultivated and sensitive. His disposition is placid and meditative and on the lines of quietism and mysticism, but he does not claim any psychic gifts beyond a sort of intuition, and, I suppose, inspiration of the orthodox type.

He spoke with some enthusiasm of Miss Evelyn Underhill's book on Mysticism, which I had recently seen reviewed and have now got, though I don't know when I shall have time to read it. It gives a sane historical account of Western Mysticism, and the interesting thing which Tagore told me about it is that it is completely in accord with the Mysticism of the East, even the phrases used being much the same, or at least being closely equivalent. Whether this is because they have a common historical ancestry, or because they are both based on personal experiences of the same kind, I don't know; but it all seems to tend in the direction of unity.

At the end of this month of August, 1913, the British Association for the Advancement of Science met at Birmingham, with Sir Oliver Lodge as President. His address was published later in the small book called "Continuity." Immediately after the publication of the address in the daily Press, letters began to pour in, and some of them came on to me, in batches of thirty or so at a time. Those in the first consignment were from people in Britain, then they arrived from France and Germany, then a day or two later from Italy and neighbouring countries, and so on. A week after the delivery of the address, letters began to arrive from the east coast of America, and a few days later from the Middle West, with the Pacific coast following a little later still. Then South Africa came in, and later on Australia and New Zealand. I dealt with a few hundred of these letters, sending back to Sir Oliver those that seemed worthy of his attention.

25 October, 1913

I suppose that as President of the British Association I shall be receiving a lot of bad and lunatic Physics.

There is no earthly reason why you should be bothered with it, but some of it may however be amusing, and as I believe you take some psychological interest in these vagaries, I pass them on to you without supposing that you will do anything in the matter, except of course when you feel inclined.

13 November, 1913

Of all the accumulation of stuff that arrived during the past month or two, I have destroyed far more than half; but one fraction I have sent to a scientific friend of mine, and another fraction I have sent off to you. I do not know whether there are many grains among the chaff, but you will deal with it as you think best. I hope it will not be an undue burden, since there can be no sort of urgency about it, and some of the stuff may be amusing.

I have another parcel of books of a different kind which I have long thought of sending to you; namely, selections from my over-burdened shelves which do not appear serviceable to me, but which may in a few cases be of use to some one else.

The difficulty in that case is to make selection, because I often find when I have got rid of books that there are one or two which I miss, and hunt for, and am uncertain whether they were got rid of or not. I once sold a considerable number of books at 1s. apiece. It seemed a good bargain at the time, since it brought in a good many sovereigns, but on the whole I think it was regrettable, the only reasonable excuse being lack of space.

4 OCTOBER, 1911—12 FEBRUARY, 1914

All public men receive requests for financial help from people who are in need or say they are in need. It is usually found that deserving people tend to suffer in silence, while the undeserving are very ready to ask for contributions. Still, it is difficult to decide from a letter, and Sir Oliver sometimes sent such letters on to me, on the chance that something might lead me to some estimate of the case. The following note seems to be in reply to some query of mine as to his custom with the letters he did not send on.

Those begging-letter cases are very puzzling. I have no rule about them. In some cases I feel a sort of instinctive inclination to send something, in most cases (I think) I do not. I am sending £1 to the man X—, but telling him that further applications will be ignored; otherwise one might go on keeping him.

The 1914 meeting of the British Association was to be held in Australia, and about the end of 1913 Sir Oliver was wondering whether to go or not.

9 December, 1913

Whether I am going to Australia or not is quite uncertain. I went so far yesterday as to make inquiries about ships and to reserve certain berths for a time, in case I decided to go; but, from the correspondence that comes from the other side of the world, it seems to me that I shall be economizing my own peace if I stay at home.

However, he went, as we shall see later. The remark about economizing his peace was called forth by the numerous requests he was receiving for lectures and addresses in various parts of Australia.

The next letter refers to a manuscript volume which I had partly read and reported on to Sir Oliver. He was continually receiving manuscripts from strangers who

wanted him to help with publication or to express opinions ; sometimes the writers sought to instruct him on Physics !

17 January, 1914

Concerning the Philadelphia man, you are dealing with it exactly as I should wish. I trust that you will not think of reading through it. One way is to return such a manuscript to the sender, immediately, but that seems rather brusque. I hope however that that will be the ultimate result. It was unfair to trouble you with a manuscript of the kind you describe, but without looking at it I did not really know what kind it was. Naturally if I have reason to think that anything is real Physics, I should attempt to deal with it myself ; but the chances are always strongly against that in any individual case, especially from unknown people who send their manuscripts about without permission. I suppose they really deserve jumping on for doing so, only one does not like to do it.

It was only now and then, in his lighter moments, that Sir Oliver used slang ; the last sentence above does not sound at all like him.

The next letter is mainly about S.P.R. private matters, but I quote part of it.

3 February, 1914

. . . At the last meeting of the S.P.R. on Friday, 30 January, 1914, Lord Rayleigh was in the Chair for the first time. Mrs. Sidgwick read the paper, on some of the By-products of the Piper Case and the absence of reality in the nomenclature of the Controls—Phinuit, Imperator, Rector, etc.—the Controls as distinct from the Communicators. I need not go into all that : her paper will be published. It is a

very long and laborious piece of work, based upon the American records of which she only gave a general idea. I spoke afterwards and so did Gerald Balfour. Nobody else spoke, but what was important was this: that both Mrs. Sidgwick and Gerald Balfour¹ burnt their boats, so to speak, by expressing themselves as completely satisfied that telepathic communication with the dead was possible, i.e. they believe in the reality of the Communicators though not of the Controls. They have been a long time arriving at this conviction, and have been very critical and sceptical and careful; so their conversion, which has been extremely gradual, is all the more valuable when it comes.

The next letter gives further indication of the immense amount of material that Sir Oliver received by post from strangers. He had been in Egypt for a holiday after the British Association Meeting.

5 February, 1914

I am now engaged in wading through a mass of stuff which came while I was abroad after the British Association. I have done a great deal of it at odd times, and this is, I hope, the last of the pile. Out of it I am sending a few things to you, not because they are likely to be of any importance, but because in some few cases they may be either odd or otherwise interesting. You will perceive from the dates that

¹ Now Lord Balfour. Mrs. Sidgwick is his sister, and widow of Professor Henry Sidgwick, who was the first President of the S.P.R. This group has represented the conservative and cautious element in the Society, and has been criticized accordingly; but the caution has been wise and far-seeing, and the S.P.R. owes much to this group of workers. What is said in this letter is no breach of confidence; the meeting was open to all members.

it is ancient material, though I have not looked at it till this minute. I wish that people could be stopped from casually writing a lot of stuff to busy people. I suppose they have no imagination, and that each one thinks he is the only one.

I see that some of the letters refer to a few remarks I happened to make in a discussion which I found going on in the Biological Section, concerning the pre-determination of sex in the breeding of animals—a thing on which practically nothing is known. These remarks have been widely reported and have brought me a lot of correspondence, most of which I have ignored. I trust it will not bore you if I pass on some of the unsifted material in this direction, among others.

Some of the incidents in psychical research evidence are known as "cross correspondences" or—for short—"c c's". Fragmentary and incomprehensible automatic scripts were received by several automatists—mostly non-professional—and these scripts, when put together by the workers of the S.P.R., were found to make sense. The messages purported to come from deceased people, mainly leaders of the S.P.R. In life, these investigators were specially anxious to find some way of deciding whether an ostensible spirit message did really come from a disembodied mind or whether it could be sufficiently accounted for by telepathy from living minds—that is, from minds still living in the flesh. The cross correspondences certainly suggested that someone on the other side was trying to provide the required kind of evidence, for the fragments were not understood until they were put together, so it is difficult—though not perhaps quite impossible—to invent an explanation based on telepathy between the living.

Many volumes of the "Proceedings" were concerned with reports of these cross correspondences, and I worked conscientiously through them, with an open mind and a

will to understand ; and I realized that an enormous amount of work and thought had been put into the preparation of each case. But sometimes I got rather impatient with this kind of evidence. For one thing, there seemed to be too many unknown factors ; factors unknown, that is, to the general reader, and that the evidence accordingly could not be convincing to anyone except the investigators. The mass of material was large, and it spread over a considerable period of time ; the printed part was inevitably small in proportion to the total mass, and the outside reader could have no proof that the selection was made so that it fairly represented the evidential quality of the whole. In short, too much depended on the reliability of those who selected, and the general reader could not feel that the evidence was convincing. Now that I know the investigators and have talked with them about the evidence, I regard the cross-correspondences as more evidential and more important than I did when I wrote the letter to which the following is a reply.

11 February, 1914

Your outburst about the *Proceedings* and cross-correspondences interests and to some extent surprises me. At least I am a little surprised that it should be called out by the recent paper of Miss Johnson, because when I saw the paper I wrote to her to say that I thought it would help people who had a little legitimate difficulty in understanding c.c.'s—help them to realize how like the atmosphere of orthodox literary criticism that of the c.c.'s was.

I think, however, it must be extremely difficult to attempt to read them critically ; that would require serious study, not to be lightly undertaken. But I should have thought they were fairly interesting if read as a scientific paper is usually read if written by a person of repute, viz. to realize the meaning of the

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material recorded and the impression which is produced upon the mind of an expert who really has immersed himself for a long time in the details. No reader can be in a very favourable position for criticism.

But, apart from criticism, the record of experience is instructive. I admit that this attitude postulates some faith—postulates perhaps a good deal of faith—in the competence of the investigator; but it is the usual attitude we take. I have often noticed that literary people are more sceptical than scientific people are; perhaps in connexion with psychical things quite rightly so; and of course it is entirely necessary that one or two scholars here and there shall take the trouble to go into the matter fully and work out both the strengths and the weaknesses.

I see you think that better work could be done by selecting a good medium and introducing a large number of strangers. But our opinion is that that method of investigation has been already accomplished. We know that results can be obtained in that way; but we do not see how to make crucial any one mode of explanation as applied to that kind of phenomenon. It is clearly not beyond telepathy. It is well calculated to make an impression on individuals, but scientifically it is not conclusive. The object of these more laborious methods is to get something conclusive, and to run the risk of offending some supporters of the S.P.R. I think indeed that if the workers at this lode had to choose between giving up the work or giving up the Society, it would not be the work that they would abandon.

However, it is extremely interesting to see the sort of impression made upon a perfectly fair-minded critic as to the cogency of these c.c.'s. I have often

said that people would imagine that anything could be made to mean anything, and that the interconnexions were after all only efforts of ingenuity. They are indeed the results of ingenuity; but, as we hold, not of *our* ingenuity; we consider that we are only deciphering what is already there to be deciphered.

If you had the whole clue perhaps you would agree—also perhaps not. But I certainly admit that members of the S.P.R. are at a disadvantage—and for the present are necessarily at a disadvantage—in baying nothing told them but the mere literary aspect of these things, with every trace of human interest or emotion kept in the background, or kept out altogether.

Well, that is how we stand; and I see nothing for it but to read the thing, if you read it at all, in a spirit of tentative and provisional acceptance, in faith that a fuller meaning will emerge by and by.

I do not know that this pontifical utterance will be of any use to you, but it is all I feel able to offer.

Correspondents often asked for psychical books to be recommended. The next letter refers to this, also to a book on Hell which I had been reading. I do not remember it, but apparently I corresponded with the author; perhaps he had sent Sir Oliver a copy, and I had acknowledged its receipt.

12 February, 1914

I hope you tell inquirers about your own books, also Barrett's. They may be more suitable to them than my own; I think in most cases they are. Don't let modesty or any other feeling prevent this, especially if you are acting for me in the matter.

I have just received your letter this morning, and am interested to hear that "Hell" is still lively. If

I have time I think I should be rather interested in seeing for a few minutes the copy of Mr A——'s book. A few belated ruffians of this type succeed, I expect, in doing a great deal of harm. I was not aware that they still survived.

CHAPTER III

17 February, 1914—16 November, 1914

Resignation of Principalship—Dilemmas—*Asomos*—Infallibility—“The Unseen Universe”—A R Wallace—Kelvin—Herbert Spencer—Criticisms—Freud—Dreams—British Association Meeting in Australia—Patrick MacGill—Maeterlinck—Lord Roberts—Science and Religion at Browning Hall—Psychology, Psychical Research, and the British Association

THE next letter contains matter which was private at the time, concerning the resignation of the Principalship of the University of Birmingham, but there is no privacy about it now, and the letter contains interesting reminiscences of Alfred Russel Wallace

17 February, 1914

Thank you for the criticism of M——’s book, it would have taken me some time to realize the kind of stuff it was. I hope I was not too complimentary to him when I acknowledged its receipt, I don’t remember what I said. Miss Bassett¹ tells me that I said no more than that I was too busy to criticize. If he writes again asking for an opinion I will try and let him down a bit, otherwise I shall take no notice. I suppose he may be credited with good intentions, which I always consider the feeblest kind of praise, because the only people without good

¹ His other secretary. Mr Brascoe was his University secretary.

intentions are criminals ; and I am not so sure about them.

I shall return you Mr. A——'s letter. He tries, like many people, to impale his adversaries on the horns of a dilemma, but most of these dilemmas are easily evaded. You might as well say : We must either accept Homer's account of the Trojan War or else reject it : A thing must be either on the top of a pole or else at the bottom : or, If a thing is not black it must be white. As to the word *æonic*, I suppose a Greek would have used and had to use that if he meant "everlasting" as well as if he meant "for an age." I find that many people think the word "eternal" is stronger than "æonic," but it is only the Latin form of the same thing, and has the same

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the Lit. and Phil. Soc. there. Why on earth I ever accepted I have not the least idea. It is some relic from last September which has come home to roost. I expect I was too busy then to say No, and somehow it drifted on; and they rather forced my hand by showing me printed things afterwards. The subject appears to be the "Ether of Space," so I shall just go and say what comes into my mind at the time.

I have a more serious thing to do at Liverpool in March, viz. to address the annual conference of a group of ministers from all over England—Unitarian ministers I think they are. Jacks did it once; so, I think, did Sir Henry Jones. They are an intelligent body; and the secretary has put me down for "The Unseen Universe," which I did not rebel against, because of the book under that title some 30 or 40 years ago, which will furnish a sort of starting or jumping-off place. But in this instance I think I had better write something.

I may as well tell you confidentially that I have been in a quandary this last month or so, and have once or twice been on the verge of giving up the Principalship and perhaps going to London, in order to get more leisure. But after a considerable amount of argument and a feeling being indicated that it might hurt the University, I have decided to stay on for the present. It has not become public in any way and I hope will not. Thursday the 19th February was the day on which resignation might have been received, since that is the Annual Meeting of the Court of Governors, the only body competent to receive it since it is a Crown appointment. So now I am feeling rather more settled again. The only change that has been made is that I am taking over the expenses of the laboratory from the University,

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Wallace's are of a low and simple order in comparison; but then he is dealing with much more ordinary subjects.

The simple way in which he is satisfied with his own knowledge, and allows any one small argument or special case to convince him, or to upset his faith, or to have some other considerable effect upon his mind, reminds me of Herbert Spencer, with whom I cannot but think he had much in common, although doubtless on a lower intellectual elevation. But he was much more human and accessible and altogether more attractive than Spencer.

I never knew him on equal terms. We corresponded very occasionally. But I remember seeing him when I was a youngster at a friend's house in Essex, east of London: Maryland Point, a desperately uninhabitable place now, I should think. Wallace came to dinner, and I walked back with him to the station. I was impressed with his appearance and cordiality and what seemed to me a sort of weighty silence. The friend, I remember, was Sir Nathaniel Barnaby.

It is a wonder I recollect his name; I put it down here because I have forgotten it for years. He was a friend of my Uncle Robert's, whom you know more or less through the Piper communications—less rather than more.

I feel sure you will be interested in reading Wallace's Life when I send it you, if you have not already had it. I see it came out in 1908, but I have only quite recently got a copy. I gather that Wallace's son is bringing out a further history of his father, together with a lot of letters which he is collecting.

The next letter is in reference to the proofs of a book, which I was reading for him. Sir Oliver has always wel-

comed criticism; he says he nearly always learns something from it, though I should think that sometimes he merely learns that the critic is not competent to criticize.

7 March, 1914

Your note and comments on my book, with additional information and examples, are always interesting and instructive. I hope you will never refrain from commenting on substance as well as on details—especially in case of hostile criticism. Hostile remarks received in time are always likely to be helpful even when truly hostile. *Fas est et ab hoste doceri*. The adverse criticism and remarks of a friend are still more helpful.

27 May, 1914

. . . As to Freud, I am not impressed with his Dream book, any more than you are. I do not believe that any one hypothesis will explain all dreams; and he seems to me to press his hypothesis to death. However, it is not a subject that I have really studied, and I am only judging it as an outsider.

I shall be enclosing you some more or less rubbishy material, but I do not remember that any remarks are necessary concerning any of it. I do not know whether I am sending a long letter from a man who imagines he has discovered the cause of Gravitation. If so, you may take it that I have not read it, but that of course he has not.

At this time we were on the point of moving into another house, which I had described to Sir Oliver.

28 May, 1914

I am interested to hear that you are on the verge of moving. I congratulate you heartily on a south

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aspect; no other aspect is worth having in this country, because you thereby get all the winter sun and not too much of the summer sun. I hope that you will effect the move without difficulty, and find it a satisfaction and improvement.

Sir Oliver decided to go to the British Association Meeting, and sailed for Australia on 3 July, 1914, on the *Orvieta*. During his absence his secretary, Mr. Briscoe, partly dealt with correspondence, and Sir Oliver himself was so full up with meetings and lectures in Australia that I heard very little from him. The War broke out a month after he left our shores, and he was unable to return in the *Orvieta* as planned. Mr. Briscoe wrote me on 3 October, that the *Orvieta* had been taken for troops, and that Sir Oliver was returning on the P. and O. steamer *Morea*, due to arrive at Plymouth on 16 October. The first I heard of him direct was a note scrawled in his own hand, dated 19 October.

19 October, 1914

Back again; just arrived. Voyage adventurous, but all well. I hope you are comfortable and fairly happy, in spite of all this upset.

31 October, 1914

. . . Yes, I read "Children of the Dead End," by Patrick MacGill, on the home voyage; somebody had it on board ship. I recommended it to many people who also read it. It is a very striking book, and will, I hope, do good.

Thank you for informing me about Maeterlinck's new book.¹ I had been half thinking of ordering it, and am glad to have your account of it. I think his writings will be useful and open people's minds.

¹ "The Unknown Guest."

6 November, 1914

. . . What a splendid death has fallen to the lot of General Roberts!

I have to talk next week in South London to a big meeting at Browning Hall, about Science and Religion. A brother of Stead has started what he calls a Science Week there, in which each day he has a speaker representing Science as a friend and not a foe to Religion. He has got the required number of scientific men on his list, and he made me promise to open the campaign next Sunday. I do not know when I shall have time to think about the subject, but I mention it so that if you do happen to have a hint to give, there would be time to receive it.

The addresses in question were published later on, as a small book entitled "Science and Religion."

The following note was sent me as a matter of interest :

7 November, 1914

AN INCIDENT AT A RECENT COUNCIL MEETING OF THE
BRITISH ASSOCIATION

On Friday afternoon, the 6th November, I attended in the ordinary course a Council Meeting of the British Association at Burlington House, London.

Towards the end of the meeting it so happened that the sub-section of Psychology, which was started two years ago as an offshoot from the section of Physiology, was mentioned, with reference to the choice of a President. Upon this Professor Vernon Harcourt, F.R.S. (chemist, late of Oxford), made a short speech, asking how came it that Psychology was associated with Physiology, and how did it enter into the programme of the British Association. Unfortunately I happened to be talking to Crookes at the time, *sotto*

voce, on some quite different subject, so that I did not notice his exact words. But when he sat down, the Vice-Chancellor of Manchester (a botanist, Weiss) got up to explain that they had a lecturer in Manchester on Experimental Psychology, with a laboratory for taking time reactions, etc., and that it was quite an orthodox subject. Upon which a Physiologist rose and said that the Psychology dealt with in their sub-section had no reference to Psychical Research.

An officer of the Association, possibly the President—I forget exactly who—then said: "Ob, it has nothing to do with Psychical Research or ghosts: 'Psychical Research' is a misnomer, because there is no research in it."

Professor Vernon Harcourt then got up again, and said that he thought the term "Psychology" misleading, as it sounded rather like "psychical"; and he thought his inquiry was dictated by a legitimate caution.

Little more was said at the time, but it was very clearly indicated that anything approaching psychical research was taboo.

This interested me a good deal, as typical of the present attitude in the scientific atmosphere; that is why I record it in this note.

I tackled Vernon Harcourt after the meeting, and asked him if he was not acquainted with the term "Psychology," and with the fact that it had been taught by professors in all reputable universities for centuries; to which he replied by asking whether there was nothing psychical involved in Psychology, and how could Psychics be excluded from Psychology; that he was acquainted with the term "Psychology"; but considered his interference legitimate and necessary, as he evidently did not like even a sub-section of

the Association having so ambiguous and dangerous a title.

The general ignorance of some scientific men certainly does amaze me; but to taboo Psychology because of our recent unorthodox investigations goes beyond what I should have anticipated. And even the botanist of Manchester, to whom I afterwards spoke, seemed to associate the term "Psychology" with the experimental branch of that subject, though he also remembered that it was included in the professorial Chair of Philosophy.

I fully expect that attempts will be made from time to time to terminate the existence of the young sub-section, for fear it should blossom into a section full blown, as Physiology itself did about ten years ago.

The physiological main section is largely medical, or at any rate uninteresting to the public; and papers of more general interest, with a psychological bearing, they relegate to the sub-section, which they started with the partial but suspicious approval of the Association two years ago. When the sub-section met in Birmingham, J. H. Muirhead was its Chairman; but I do not know that it achieved very much, and I do not remember that I ever went to it. I suppose that the Association authorities consider Psychology the most scientific side of Philosophy, and tolerate it as at least having the advantage of excluding Metaphysics.

I cannot say that I am proud of the average scientific man at the present time; fortunately there are some exceptions.

CHAPTER IV

23 November, 1914—11 December, 1914

Science at Browning Hall—Voyage from Australia—Detection of Submarines—Visit to Bradford—Letters to Newspapers—Pioneer Work in Wireless—Marconi—The Lodge Sparking Plug.

THE Science Week at Browning Hall was very successful. The following letter refers to Sir Oliver's address.

23 November, 1914

The hall was crowded, people standing up and so on; but it was not a big hall such as they gave me in Australia. I should not think there were more than a thousand in it, though as there were galleries perhaps there may have been twelve or fifteen hundred. The Mayor and Corporation of Southwark were on the platform in their robes, and everything was done to lend some importance to the occasion.

Whether it did much good I cannot say, but I hope it may have done. I think that the *Christian Commonwealth* is likely to have taken it down and to publish it in full—no doubt with some errors; but I think I got a little disjointed towards the end, not having time to bring out the connexion of ideas clearly.

I saw in a Ceylon paper which some one sent, that during the voyage of the *Morea* there was either a shortage of

labour or the Lascars went on strike—I forget which—and the passengers took a hand at cleaning the decks and the like. The newspaper man made a rather amusing story out of this, visualizing the grave and reverend members of the British Association swabbing the decks, and I rather think there was a cartoon depicting some of them thus employed. I asked Sir Oliver about it, and he replied in the following note:

25 November, 1914

Thanks for the Ceylon paper. The episode has been referred to in a good many English papers, and I have been chaffed about it. It is quite true that the passengers swabbed decks and did other cleaning work, getting up at six each morning, and behaving in an energetic manner. I used to get up, but of the deck portion I did very little; for one thing there were not enough brooms, and the younger men usually got them first, also the hose pipe, which was an attractive occupation, was generally seized by some energetic youngster; so if the cleaning had depended on me, the ship would have remained dirty. As it was, it was much cleaner than when the Lascars were in operation; and I heard ladies remark on the unusual cleanliness of out-of-the-way corners later in the day, though they had seen nothing of the early-morning operations.

Sir Oliver was on the Board of Inventions and Research, of which Lord Fisher was President, and much experimental and other work was being done, of which the public necessarily knew nothing. But people wrote asking about various things, so Sir Oliver sent me the following

27 November, 1914

If people ask about detection of submarines, and things like that, they can be told that the Admiralty

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is giving full attention to the matter (and indeed a Royal Society Committee is sitting on that and many other scientific questions of importance. I go up every week for it).

Regarding a projected visit to Bradford, I asked Sir Oliver whether he would come to our house for a night or two, or whether he would prefer an hotel, in which latter case I would make the necessary arrangements for him. At this time I was in bed—had been in bed some months, my heart being troublesome—and was unable to bear much company; moreover, I thought he might be more comfortable at an hotel where he could do as he liked. Our ways were quiet, and we kept early hours. On the other hand, I wanted to see as much of him as strength permitted. It happened that the Rev. Gilbert Muir, Superintendent of the Eastbrook Mission—a Wesleyan institution with a Brotherhood of about 2,000 members—was very eager to get Sir Oliver to speak to the men, and I conveyed this wish to the proper quarter. Mr. Muir asked me about expenses and fee, concerning which I had no authority to speak, but I said I would ascertain Sir Oliver's wishes in the matter.

28 November, 1914

It was very good of you to have taken the trouble to give me such long and full information about the Eastbrook Brotherhood. What you say about it encourages me to come. I like an audience of all men of that type, and should prefer it to the more civic function at St. George's Hall.

From some points of view the quieter my visit is kept the better, because the correspondence afterwards is apt to be rather overwhelming.

But please put any idea of fee or railway-fare out of his mind. I never accept anything of that kind. I have in some cases objected to a collection, and have

felt inclined to offer to defray expenses if they will dispense with one. But I find they generally pitch their expenses rather high for such occasions, and I have not felt justified as yet in going to that extra expense.

For one thing, I thought that if I made that a rule it might make people more chary of asking me, but then I am not sure that it would—it might even have the opposite effect, which would be decidedly a nuisance.

Concerning a visit to you—I should come simply for a talk, not necessarily a long talk, I am no hand at billiards or anything of that kind.

As to time, I suppose that the Eastbrook Address would be on a Sunday afternoon. I wonder whether it would be possible for me to come on to you after that, I have no idea of the locality. If I could get everything into one day, it would be an economy of time, only I am afraid Sunday trains are a bit awkward.

I am writing to Mr Muir to tell him that I will come some time.

Again many thanks for the information sent.

The next letter refers to the Science and Religion lecture at Browning Hall a fortnight before.

3 December, 1914

A Press cutting Agency has sent me a mass of references to my recent Address. I do not know whether it would amuse you to look through them—I have not had the patience to do so.

I keep a scrap book of any cuttings which seem likely to be of interest in the future (say to my children, or otherwise) as marking to some extent what is going on in different subjects at successive dates.

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For instance, I keep such things as Sir Bryan Donkin's letter, my replies, references in *The Guardian* or other reputable papers (whether hostile or not, perhaps chiefly the hostile ones unless they are mere abuse), sometimes extracts from *The Freethinker* or papers like that if they are not blasphemous, illustrations and humorous notes—anything, for instance, that might possibly interest descendants.

But the greater part consists of mere repetition and useless verbiage, and this I destroy. I seldom have time to make much of a selection, and the result is I sometimes throw away things which might be retained, and probably more often retain things which might be thrown away.

The result is rather a bulky series of books. The last batches I have had I propose to enclose, but if you have not time to look at them, never mind! Sometimes contemporary comments are of interest. If you do look at them and think fit to return a few for me, that is what I would suggest.

7 December, 1914

Concerning my visit to Bradford: I am afraid it is giving you an absurd amount of trouble; but if you can easily supply me with a bedroom, I should certainly prefer that to an hotel. My wants are very simple; I don't drink anything, and have no fad about food, and am just as well off in a small room as a big one. I note that you recommend the 12.50 from Birmingham, reaching you about half-past four, when your sister will doubtless give me a cup of tea and some bread and butter. This will be on Saturday, January 9th, unless something unforeseen occurs to prevent it. And, by the way, if it should happen, for any reason whatever, that my coming would be in-

convenient, I must trust you to let me know, because even at the last moment I could easily stop at an hotel I must depend on you to do this

When I send you Press cuttings, or anything of that kind, if I think a reply desirable I will plainly indicate it As a rule I think reply is very undesirable, it does not even occur to me to think of one, except when the opponent or correspondent is somebody of importance, or one who talks exceptional sense Generally newspaper letters are weak and trivial, things to be ignored, as a rule barely to be read

I had been interested in the history of wireless telegraphy and telephony, and was of the opinion that the public did not altogether appreciate the importance of Sir Oliver's pioneer work in that subject, the popular idea being that Marconi was the sole inventor I asked Sir Oliver some question about it, to which the following letter is a reply He has always been very ready to give credit where credit is due, and has often said that Wireless would not have so quickly reached the commercial stage without Marconi's talent and industry, but Sir Oliver has always been rather silent about his own share in solving the purely scientific problem, and popular misunderstanding is even yet not fully dissipated The most important part of such discoveries is in the early stages worked out by scientific geniuses, the commercial application and development, though of great importance, requires another and less rare order of mind

11 December, 1914

I can lend you a statement, drawn up by Silvanus Thompson, about the early stages of Wireless Telegraphy I have not looked at it lately, but he is a recognized authority on Scientific History, so I suppose it is somewhere near right

If a few other pamphlets are enclosed (which

Briscoe may find) you need not bother about them, nor do I want these other ones back; but I should rather like Silvanus's back some time. Six months hence will do as well as now.

The true originators were Maxwell and Hertz. Upon them everyone has built. As to the Lodge Sparking Plug; the Lodge Ignition was mine in theory, but it was made commercially practicable by my sons. The Lodge Plug is entirely my son Alec's: I had nothing to do with it; it was an accessory to the ignition, and in commercial importance has eclipsed its parent altogether. Their firm is called Lodge Brothers.

The firm of my other two sons is called The Lodge Fume Deposit Co.

As to my own main work, it has been mainly connected with the Ether of Space in its various aspects, powers, and relationships.

As to dates, a lot of my work which ultimately led to Wireless Telegraphy was done in 1888 and 1889. It was then I came across the Coherer principle.

What is called the "Wireless" Lecture was given in 1894, first at the Royal Institution in the spring, next at the Oxford British Association meeting in the autumn, even more fully, and exciting considerable attention, but in the optical more than in the telegraphic direction; though it was at the first of these lectures that my friend Alexander Muirhead conceived the telegraphic applications which ultimately led to the foundation of The Lodge-Muirhead Syndicate, now bought up by The Marconi Co.

It was that Royal Institution lecture which was published in *The Electrician* and illustrated by the editor because I had no time, being very busy then—illustrated not very well, indeed—and that same

year brought out as a book called "The Work of Hertz and his Successors"; for Hertz had recently died, and I wished to raise a memorial to his memory.

Two years later (in 1896) Marconi came over with the same thing in a secret box, with aristocratic introductions to Preece of the Government Telegraphs, and was taken up and assisted by him—who was far more ignorant than he ought to have been of what had been already done.

So with great spirit and enthusiasm and persevering energy, and assisted by Government officials, Marconi overcame many practical difficulties and really began to establish on a practical commercial basis his system of Wireless Telegraphy by Hertzian waves.

The tuning however, which is now so essential, was begun by me in 1897; a patent which was extended by the Courts, and was included in the sale of the Lodge-Muirhead Syndicate to the Marconi Co. For the use of this patent, as I am mentioning a lot of things, I may say that the Marconi Co. pay me a thousand a year during its extended life; but as a matter of fact it has not much longer to live—only 3 or 4 years. Possibly I have not much more either: one never knows.

CHAPTER V

23 December, 1914—21 February, 1915

Psychical Work and Scientific Reputation—Visit to Bradford—Macterlinck and the Elberfeld Horses—Possession—Appreciation of Beauty—Square and Cube Roots—Scottish Railway Accident—Verhaeren—Relativity.

SOME people have thought that Sir Oliver was catering for the public taste in speaking and writing on psychical matters, or have even thought that he was credulous and unbalanced. Nothing could be farther from the truth. Sir Oliver spoke on these things when he thought it his duty so to do. He was careful in his investigations, and was sceptical at the beginning; his conclusions were arrived at very gradually, and always on a basis of facts. He had no illusions as to the effect on his scientific confrères. In a letter (23 December, 1914) which is for the most part private—mainly because it concerns living people—he says: "That my occasional psychic utterances do harm to my scientific reputation—even so far as causing some of them to think me more or less cracked—is manifest, for I have many signs of that." Yet he pursued undeviatingly the path which duty indicated, with a noble courage and a calm friendliness even to his detractors. In nothing does Sir Oliver's character show more notably its lofty nature.

Sir Oliver came to Bradford on 9 January, 1915, stayed the night with us, spoke to over 2,000 men at Eastbrook Wesleyan Mission Hall on the 10th (Sunday afternoon), and went to London after tea. My first impression of him when he entered my room (I was an invalid, in bed,

at that time) was strong and lasting. I see him still—the gigantic stature, the great head, the quiet and natural dignity of bearing, with the slight stoop of the scholar relieving what might otherwise have been a rather overwhelming presence. His voice was quiet but remarkably sonorous, a beautiful bass baritone voice, worth listening to for its very quality, apart from anything he said. But everything he said was very well worth listening to and pondering over, for its matter. He was not a great talker. He would listen patiently to others, then make some remark which either summed up the matter or went deeper than what had just been said. And he was not without a sense of humour. The Rev Gilbert Muir, Superintendent of the Mission, came up for him on the Sunday afternoon. In conversation Sir Oliver said, "You are talking to-night?" and Mr Muir replied, "Yes, I am preaching." I do not think that Muir meant any correction, but Sir Oliver lifted one eyebrow slightly higher than the other, as he did when amused, and his eyes twinkled as he said, "I beg pardon. You preach, I talk." As I have just indicated, he seemed to prefer listening to talking, if he could be told facts, I suppose that is characteristic of the scientific habit of mind. I remember that he asked Mr Muir whether Wesleyanism was strong in Bradford, he knew that Muir would be an authority on that. Similarly he seemed to lead anyone with whom he came in contact to talk about his own speciality. I was struck by this. If we all did it, we should accumulate a great quantity of knowledge.

I have remarked about Sir Oliver's stature, he was then 6 feet 3 inches in his socks, and said he weighed fifteen stone. He looked thin, but this was due to his exceptional height, when seated it was noticeable that he had a great spread of shoulder, and if he had been only 6 feet or so he would have looked broad. If he had had any flesh on him he would have weighed twenty stone, I suppose, but he was lean. At that time he was sixty-three and a half years of age. We had good talks, so far as my strength allowed, and the visit was a great experience.

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It was a pity it was so short, but he had business in London, including a sitting with a medium which I had fixed up for him so that he would be anonymous. He wrote in a long letter on the 12th: "I should like to have had another evening talk with you, but under the circumstances it was quite well that I took that evening train to London. I saw publishers as well as many other people, and had a busy time."

The *Hibbert Journal* review mentioned in the next letter was of Maeterlinck's book "The Unknown Guest," which contained an account of the famous Elberfeld horses which did sums and all sorts of other wonderful things.

14 January, 1915

I read the January *Hibbert* in the train, not having had time to read it before. There are several matters of interest in it, and I read your review of Maeterlinck's book. I have likewise read his account therein of the Elberfeld horses. Certainly their performance is sufficiently remarkable, on any hypothesis; but Maeterlinck talks a lot of nonsense about "number" and its mystery. The spelling of sentences is quite as puzzling as the answering of numerical questions.

The extraction of square and cube roots, etc., is extremely easy when the number given is an exact square, cube, or fourth power; and no others do they attempt. Maeterlinck's idea that it is necessary to go through a process involving multiplications and divisions is merely a mistaken one. That is what is *commonly* meant by extracting a root, namely making as close an approximation as necessary to a number which has not got a numerical root—which is the case with the great majority of numbers. But to guess, say, the exact cube root of a number of six figures is a thing that can be done at once; you have only got to attend to the digit at one end, and to the

general magnitude of the number at the other end, the rest of the number is insignificant

I might have explained this to you verbally while I was there

When I say the process is easy I do not mean that it is easy for horses. The animal part of the matter seems absurd, and that of course is the real puzzle, but there is no need to make it artificially mysterious by non-existent complications

Calculating boys, again, do not go through any conventional operation—they evidently get the answer by intuition—whatever that may mean

Maeterlinck assumes that there are only two explanations of the horses—telepathy from the sitter, and subliminal activity or teleesthesia. That is because he will not face the spiritistic hypothesis, namely possession. My own idea is that some form of possession is necessary for explaining musical prodigies, and probably arithmetical prodigies also

The "possession" of animals, if possible, is by no means yet proven, and it is a further step, but, if the facts are as stated, it is a step which I think will have to be taken. The other explanations do not amount to anything

There are two examples given in the Bible—Balaam's ass and the Gadarene swine, both possibly apocryphal, especially as Balaam's ass may have been "direct voice," if anything physical at all

But anyhow, if possession is possible at all, possession of animals (even possibly by non human intelligent entities) is an hypothesis that cannot be wholly ignored. It seems to me absurd that Maeterlinck, going as far as he does, does not take this into contemplation also and give it the benefit of his vivid intelligence

If you disagree with any of this you will, at your

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leisure and convenience, let me know. I have not by any means read the whole of his book yet; I dipped into the "horse" part.

19 January, 1915

A friend of mine keeps on her desk, or in front of her somewhere, an object or a photograph or something which she thinks it good for her eyes to rest upon; and she changes it every few weeks, so as not to get too used to it and be thus practically unable to "see" it. One of these objects, a head of Apollo, she sent to me. I don't get the same good from it that she does, because I am too busy to look at things or attend to them: moreover I have had it some time. It occurs to me to send it to you, partly as a suggestion that it might be a help to have something good to look at, if you happen to be sensitive in that direction. I do not think I am; but then, I think it is a loss that I am not. We most of us live in such ugly surroundings that perhaps we get too used to being without things of beauty.

This particular head may not strike you as anything particular; there are other things of the same kind in the British Museum which are certainly more striking; and it would be quite possible for me to get a few of them when up in London. Meanwhile, as the idea of sending it has occurred to me, and as I don't want it any more, I shall post it to you.

19 January, 1915

I have just been looking at your letter with the Aaron Wilkinson sitting. I will take a copy of this letter as you suggest, and hear about its verifications afterwards in due time. It is, as you say, rather remarkable, and reminds me of the early days of Phinuit in some respects. You ask about the method of

guessing roots There is no recognized method that I know of, it is not a matter of methods or of intuition, but only common sense A person who has no liking for numbers—a class containing some of the best people I know—could hardly be expected to see this for themselves, but you can easily see it when pointed out

The example you give will do well enough The two noughts at the end we can ignore, since they of course only mean a nought in the root, so we can look at 1156 The root is plainly between 30 and 40, 1 c—the number is between 900 and 1600, more over the digit must be either 4 or 6, because no other digit will give 6 in its square If I were a horse I should therefore guess the root 360, unless I happened to notice that 1156 was nearer 900 than 1600, hence making 340 more probable But there might readily be that amount of ambiguity about a quick guess To explain a little further if the number given ends in 1, the root, you see, must end in 9 If the square end in 5 or 0, the root of course does the same, if the square end in 9, the root must be 3 or 7, if it end in 4, the root must be either 2 or 8, and no square number can end in 2 or 7 or 8

Cube roots are still easier, for there is no ambiguity about them

The cube of 1 being 1,
of 2 being 8,
of 3 being 27, 1 c—ending in 7,
of 4 ending in 4,
of 5 ending in 5,
of 6 ending in 6,
of 7 ending in 3,
of 8 ending in 2,
of 9 ending in 9,
of 0 ending in 0

So the unit place in the cube gives at once the unit place in the root without ambiguity ; and as to size, any number less than a million and more than a thousand must have two digits in the cube root, because the cube of 100 is a million, and the cube of 10 is a thousand.

So take any cube, say 804,357. The cube root must end in 3 : and as the number is getting on for a million the probability is that it is 93. One might in a hurry guess 83 wrongly ; but there would be no excuse for doing so.

You see there is no ambiguity about it at all, nor anything that involves the slightest amount of mathematics. I wonder, by the way, whether my Arithmetic book would amuse you or bore you ; it does not deal with things of this sort, but it deals with other things. But why should you be plagued with it ? I will not send it.

I have also seen your report on Mrs. Blunt's book.¹ I am rather surprised to find you report so favourably. I see the kind of sickly sweetness in the books—that strikes the eye at once ; but I had not detected the amount of sense which you have found in them. Of course I could get them published at once if I put a slight preface to them ; but I do not much want to be mixed up with it. And yet I feel, as you say, as if the books would do good to some bereaved people at the present time ; and there are lots of people who are not too hypercritical or superior to derive benefit from simple things. I have not had time to look at them properly. I am lecturing to-morrow on the War and Politics ; and next day Verhaeren is coming here to stay with me ; I will enclose a notice of his

¹ This and others were sent in manuscript by the authors, who wanted Sir Oliver to write an introduction.

lecture I am dictating this on Tuesday evening, but it will not get written till to-morrow

21 January, 1915

In supplement of my yesterday's letter

I might have added that a fourth root is merely a double square root, and gives no trouble

But I have just noticed that a fifth root is the easiest of all, since the unit place of the number and of the root are always the *same*

No doubt a simple rule could be devised also for giving the number of digits. It would have to be an enormous number that required more than two, since the fifth power of 10 is 100,000. Anything less than that therefore will only have one

The mention of my stove, in the next letter, recalls a vivid image of Sir Oliver down on his hands and knees, scrambling about the floor, looking into the inside of the said stove to see how the draught was arranged. It was an anthracite slow combustion stove, which kept in all right without attention—a convenience for an invalid. A few years after this date the electric cable was brought up, and the house was wired and radiators established.

The Scottish accident referred to was an accident to a train in consequence of a bridge having been wrecked, I think by flood water. Sir Oliver's eldest daughter was on the train, but was uninjured, the train pulled up in time for most of the passengers to alight. Some of the papers got a report that Sir Oliver Lodge had been on the train and was missing (I think one or two passengers were swept away by the flooded river and drowned). This rumour arose in consequence of Miss Lodge having with her a bag with her father's name on it.

22 January, 1915

I am sorry to hear you have not been well, and hope that you are now all right again. I want to say that

you never need explain or apologize for not answering any letters. I take answers when they come, and should very seldom notice any delay, except from strangers and people in whom I have no confidence. I have often been amazed at the promptitude with which you have answered or attended to things, and always hope that you are not thereby strained or put to inconvenience. Except in matters of urgent business it is best generally to do things when the spirit moves one, and seldom to be making an effort across the grain.

Monsieur Verhaeren is staying here now. He lectured last night. He can only talk French—which to me is a strain. I imagine that his poetry is rather like that of Masefield if you have seen it recently—realistic and what people would call coarse in some places. He is, as you say, full of interest in towns and democracy and everything human; he seems to enjoy big towns and what many people would call the ugliness of life. But I am only giving my impression; I cannot pretend to know him. It is remarkably difficult to get to know a foreigner, especially through an alien language.

I am extremely glad that you like the Apollo, and that it came at an appropriate time. I too am less awake to beauty than I ought to be, but I feel sure that the faculty can be cultivated, though in some it is born and conspicuous. My son¹ has it pretty strongly, and he tries sometimes to keep me up to the mark. I miss him now, as he would enjoy talking to Monsieur Verhaeren; they have a good deal in common, whereas I have next to nothing.

I have just opened your second letter, and find that you kindly refer to my son's recent marriage. He is

¹ Mr. O. W. F. Lodge, of Chelsea.

going now to live in Cardiff. I dare say they will be often here, but we shall miss him a good deal.

My daughter—the one who, as you truly say, was in the Scottish accident—is going to be married probably in July. She is now in London with another sister buying clothes, or something of what they call a trousseau.

It is cold here, with a thin layer of snow on the ground, so I feel sure it must be colder still with you at Thornton. I hope that stove manages to keep you warm; but your recent slight illness does not sound altogether as if it did. I wonder if you could have an electric radiator as a supplement. But I think I remember that electricity is not yet laid on.

The next letter closes with one of Sir Oliver's whimsical but half-serious remarks, rather characteristic of him.

22 January, 1915

About newspaper cuttings. My intention is to keep a record of things I have written or said; that is to say, an account of any address I have given, and a copy of any letter to a paper that I may have written; those my intention has always been to stick in the scrap-book. The difficulty is that things are reported in so many newspapers; sometimes with sufficient variety to make more than one copy instructive, sometimes not.

The other things that I keep are things of importance, and such things as you have selected for keeping: specially things of contemporary history, or personal or national interest.

I have no very clear rule; but it may be of assistance if I indicate something of the aim of these scrap-books. No doubt in some cases they may be

supposed to have a biographical tendency, so that at least some future generation of my family might like to refer to them or to selections from them. My expectation is rather, however, that I shall be leaving so many papers behind me that to relieve their embarrassment my executors will utilize the flames to a barbarous extent; in that they will very likely be wise.

But another thing that scrap-books are possibly sometimes useful for, is some solace to the second childishness of old age, if it should happen that old age occurs.

The following extract explains itself, and I include it merely as another indication of Sir Oliver's lighter side, "oscillating torsionally" being his whimsical way of putting it.

13 February, 1915

The little gold thing you enclosed in an envelope (which I have only just opened) is virtually a watch-key; that is to say, is the stem-winder of my watch. I found that it was gone when I got to London, and thought that it had dropped off in the train. It took some ingenuity to wind the watch without it that night. The way I did it was to jam the little arbor into the ward of an ordinary key, and then oscillate the watch torsionally. Next day I took it to Dent's and had another one put on. Of course it ought not to have been loose; it was less than a month since they had had the watch to clean. Thank your sister for sending it. I may as well keep it as an insurance that the new one will not come off. I have had a very busy week, but, as you see, to-day I am slacker and trying to clear up arrears. . . .

In the next letter Sir Oliver refers to Relativity, concerning which I had said something that showed my ignorance.

21 February, 1915

As to the Principle of Relativity, it is a much more technical business than you have any idea of. I am afraid it would take me too long to explain, though I should like to give you just a hint. It isn't a question of elementary mechanics about the relative motion of one body to another, it is a very fundamental thing—akin in that respect to the Dissipation of Energy. It originated in Germany, but it has caught on in many parts of the world, and large books have been written about it, and a great lot of Mathematics, some of it of a stiff kind; but to get some idea of it, it would not be necessary to wade through all this. Briefly put, one may say that it may be regarded as a revolt against the existence of the Ether of Space, though it also has to do with the relations between Ether and Matter. The Velocity of Light is its fundamental datum, and its foundation is chiefly two negative experiments which are in opposition to each other, one by Michelson and Morley in America, and one, less emphasized, by myself at Liverpool. By "experiments" I need hardly say I don't mean any single thing, but the result of two or three years' work in the laboratory, and much special apparatus. The object was to find out if the Ether moved with the earth or not. My experiment said "No," Michelson and Morley's was supposed to say "Yes."

But there was a back-door out of it; and out of that back-door some of us went. Larmor, for instance, and Poynting, and I. The "Relativity" people, however, originally Einstein in Germany,

slammed the back-door, and would not say "yes" either, but started a new opening—that the Ether didn't exist, or at any rate that we never could know anything about it; that all we could ever tell was the relative motion of Matter to Matter; and that absolute motion, or motion with reference to something not Matter, was meaningless. To which I reply, popularly, "Then Galileo suffered in vain."

Expressed thus, the thing sounds simple enough, but it has most elaborate consequences, affecting the measurement and idea of time, and entailing considerable complication to say what we mean by events being "simultaneous." That is how the velocity of light keeps bothering them, a bother, however, in which they delight and incorporate into a system. This was the basis of Larmor's recent gibe that I sent you—he wanted to point out that a blind race could be quickly confused and complicated by the slowness of the velocity of sound, and the queer timing of distant events, and could elaborate a system of Natural Philosophy on that basis, which would be bowled over by the discovery of a quicker method of conveying information, or perceiving events at a distance—as by the acquisition of eyes. But I expect it merely puzzled the Aristotelian Society, who would not know sufficient about the basis of his contention. I think I had a slap at the Principle of Relativity in my Presidential B.A. Address, but I expect it was so wrapped up as to be unintelligible.

In speaking of Einstein and the other upholders of the doctrine, I ought to add that they are brilliant mathematicians and learned people, and not to be sniffed at lightly—that is what has caused their doctrine to catch hold. They also appear to be sustained by experiment to this extent, that all those who

attempted to attack the question of the motion of Matter through Ether—and they have been numerous—have had a negative result. The Principle of Relativity assumes that a negative result they always will and must have, no matter how far they are pushed

Well, I have now given you some bare idea of the doctrine, though I didn't intend to when I began, and must be off to work now.

CHAPTER VI

23 February, 1915—1 June, 1915

War and Peace—Society of Friends—Tolstoi—Shape of the Earth—Water on Mars—Newton—Colonelcy—*Post Mortem* Questions—George Macdonald—A Psychic-religious Sitting—Inspiration—Incarnation—Intuitions—Ypres—Faraday and Rainbows—Father's Business—"The War and After"—Spiritualism—Attitude to Death—A *Lusitania* Survivor.

SIR OLIVER has always been a man of peace, but he never wavered in his conviction that the war must be fought out to a finish; his view was that the German policy stood for the supremacy of the State; that is, for its irresponsibility to any higher Power. This he held to be practical Atheism, and an erroneous and dangerous thing.

23 February, 1915

I either have sent or shall be sending a pamphlet of Gilbert Murray's on the war, which I am distributing among a number of Quaker friends. There seems to be a serious movement growing up of a very unwise, stop-the-war kind of character, by fanatical friends of peace, who if they had their way would bring about something very different from peace.

I don't know how far they are a real danger. I am sure that some of them cannot be converted; but such efforts as one can make one ought to.

24 February, 1915

Thank you for sending me your article in the *National Review*; that number came out while I was in Australia, so I never saw it. Of course I must have missed many things at that time. I have not looked at it yet.

I have been thinking a good deal lately about the conditions after the war, especially the conditions upon which we can consent to make peace. Somebody will have to decide these things; and though it is no part of my business, yet I suppose everybody ought to form some opinion. If I write out some preliminary and very tentative notes on the subject I shall probably send them to you for criticism; perhaps you will be doing the same.

There is some danger that the Quaker and ultra-peace party will act unwisely; they are already beginning to be active. We do not want to have this sort of thing all over again, even to satisfy a few extremely good but unwise fanatics, of whom, presumably, Tolstoi would have been one; though I hope by this time he has learnt better. Joan of Arc is higher than Tolstoi.

In the following letter Sir Oliver put me right on a matter of Physics. I do not remember the details, but I think I had written an astronomical article and had made a mistake about the explanation of the Martian canals. Apparently I wrote Sir Oliver about it.

9 March, 1915

I am afraid you have come a cropper over the Martian water. The argument about the shape of the earth you will find in the "*Principia*," if you have read that interesting work; the applications to the Cosmos come mostly in Vol. III.

The argument is that a globe of water would take a certain shape; and that the earth, though solid, must be of that shape; otherwise the equatorial ocean would be something like 14 miles deep, and the Poles dry. The equable distribution of water actually existing shows that the solid earth either is or has been plastic.

The calculation of the shape of the earth can be done with fair ease (though certainly a little calculation is involved), by considering a U-tube—or rather an open V-tube, with one leg from pole to centre, the other leg from centre to equator of earth; then, rotating the latter leg in 24 hours, water in the tube will stand 14 miles higher in the equatorial leg than in the polar. But there would be no tendency for it to flow back again on the surface if it were liberated; the whole is in equilibrium.

You see I am not criticizing anything you may have said, for I have not read it; I am only stating certain facts. If you wish to consider the case of a dry planet on which water is liberated at the pole, say by melting snow: then whether that water tries to go to the Equator or not will depend on the shape of the planet. If it is spherical and stationary, the water will be happy anywhere; if it is equatorially bulging and stationary, the water will accumulate at the pole; if it is equatorially depressed and stationary, the water will tend to run to the Equator, if channels are provided.

If the planet rotates, there is a figure of equilibrium appropriate to the rate of rotation. This figure is not a sphere, but it replaces the sphere in the stationary case, i.e. imitates its behaviour. Any bulge beyond this, or depression below this, will act as indicated above.

The following refers to an article on Newton in a magazine called *The Monist*

11 April, 1915

I have never read his (Newton's) letters to Oldenburg, though I certainly ought to have done. There is more vagueness and speculation in them than I should have expected, but there are as usual brilliant flashes of insight. It is interesting to see that he was not averse from gratuitous and rather wild speculation—though of course he is well aware that it is speculation, and discriminates between hypothesis and demonstration.

19 April, 1915

I am obliged to you for telling me about Sir Evelyn Wood's letter. I had not in the least known whom it was from. I have with pleasure written to him direct. I may as well enclose a copy of my reply.

You ask if he is right in addressing me as "Colonel." It is true that I have held His Majesty's Commission as Colonel for some 5 or 6 years—I was Honorary Colonel of the Telegraph Units of the Southern Army, who have their Head quarters in Birmingham. But an Honorary Colonelcy does not mean very much, and I am afraid I never acted up to it to the full.

I used to attend Church Parades, and sometimes (but very seldom) dine at the Officers' Mess. I felt rather like a fish out of water, and have now resigned. I have not however given up my Commission, and I do not quite know how the matter stands.

In the early part of 1915 I was having some teeth extractions in instalments, and the operations were dangerous because I had an irregular heart. Sir Oliver and I had occasionally discussed the question of what kind of

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evidence the one who died first should try to get through to the other, and in the next letter he goes into some detail on this point, no doubt reminded of it by the uncertainties surrounding the experiences which I was going through at the time. His remarks are instructive.

22 April, 1915

I am very glad to hear that you had an injection this time. The advantage of that is that henceforth they will be able to give you one without anxiety, and the trouble therefore is to some extent minimized.

By the way, I was thinking in the night what sort of evidential questions I should ask you if ever it happened that you were purporting to communicate. The questions I thought of were something like these :

Have I been to see you many times?

Who was the friend that met me at the station?¹

Tell me something about him.

What is the view outside your window?

They are, you see, a piffing sort of question; nevertheless they are what did occur to me, and might therefore presumably be the kind of thing likely to occur to me in the presence of a medium. You might, if you like, reciprocally some time jot down the kind of questions which under the same circumstances you would propose to ask me. I shall try and get my wife to do the same, because I feel pretty sure that hers would be too hard for my defective memory; and I want to show her in time that she must not expect good answers to specially selected test questions unless they are of the easiest and most commonplace kind. I have half a mind to ask Miss Johnson to do the same; but I will wait and hear what you

¹ This was a Mr. Lund.

think of the project, which perhaps is rather an idle one, due to my having been kept in bed most of yesterday through an attack of shivering, which I thought was incipient influenza, but which I now think was not

In reply to Sir Oliver's suggestion about getting test questions ready, I had said that if he went first I might ask him—if he purported to be present when I was sitting with any medium—what certain initials stood for, for example, the initials of Mr G W Balfour, Mr J G Piddington, or Miss Alice Johnson, all prominent in psychical research. Also I suggested that perhaps he might tell me something about his colleagues at the University of Birmingham because information of that sort would not be explicable by telepathy from the sitter. Sir Oliver rightly pointed out that questions about the University colleagues would be unwise, since he did not associate me with them, and would probably be confused by any reference of that kind. Questions about S P R people would on the other hand be quite in keeping and likely to elicit something, since he thinks of me in association with these psychical workers

26 April, 1915

Many thanks for inquiry. I am all right again, only I have to be careful about what I eat. I hope you will get an article accepted by Cassell's.

With regard to test questions the one about Lund was I thought a good one, because, although the straightforward answer might be supposed due to telepathy from the sitter, it would not be by any means an easy thing to get through a stranger medium, moreover, once having got it, any number more things could be said by you and subsequently verified by me.

But I need hardly point out that if Wilkinson were

letter; not an idea occurred to me about a single University friend as I read it; and I should have to alter my mental environment, even, to think of something to say about children or home affairs. It is rather like the case of a boy at school who, home for his holidays, keeps silence about what has happened; because he has a sort of instinctive feeling that the names of the masters and of the boys are foreign to his home surroundings and will not be understood if he mentions them, and so he says nothing; whereas of course his people would as a rule be glad to hear about them, and the names would thus gradually become familiar. But I suppose it takes a novelist's instinct, and something of his power, to make you interested in a fresh lot of people of whom you never heard, and perhaps even who do not exist. I feel that a good deal in beginning a novel: before I have picked up the thread of the characters they seem to me tiresome and confusing; I muddle them up with each other, especially if their names begin with the same letter; and it is a real mental effort—at least if one is tired, and one seldom reads a novel except when one is tired—to get the hang of it all. Afterwards it goes smoothly enough.

So I think the best kind of question is one which links on with known matter in the most ordinary way, irrespective of any danger of telepathy and such like, and then gradually expands and extends from that as opportunity arises. I have always found the most evidential things come through when not expected or when but little sought for. Sometimes a purposely arranged evidential test does come off, but I should think always with great effort and much exemplary perseverance on the part of the communicator.

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I seem to have written something to Sir Oliver about George Macdonald's book "Phantastes," hence the following letter. I do not remember what I said; I am not aware of having been specially impressed by the book, but I suppose I mentioned it casually as a book I happened to be reading.

27 April, 1915

I remember reading "Phantastes" a long time ago, but was rather puzzled by it. They were hollow people, like trees, and generally I did not care for the writing as much as some of the others.

I was only thinking this morning that I ought to get a set of George Macdonald's writings for the use of the family. Some of them meant a good deal to me at one time, and only very few (perhaps only two) do I possess. "Robert Falconer" was the first I read; hence perhaps it is that in some respects I found it the most striking. I afterwards read "Alec Forbes," but that was more secular. My reading of these early tales must have been when I was in my teens, but the precise age I do not remember.

I also attended a lecture or two of George Macdonald. One on "Tennyson as a Lyric Poet" I remember very well, and he read a lot of extracts in a weighty, sonorous manner. He also lectured on Shakespeare and on "The Moral Drift of Hamlet," of which I heard impressive details at second hand. He had a fine personality. The lectures, so far as I remember them—or at any rate one of them—were in a private house, and we afterwards had a stand-up tea. I think it was Islington way, or somewhere in London.

Sir Oliver once had a queer sitting with a certain medium, and sent me a report, evidently rather thinking that I

thus:—without a medium the Spirit cannot get through; with an inferior medium it can only get through in an inferior manner. A medium that *we* should call inferior is wholly unsuitable and unable for the purpose; the only mediums possible are the highest type, and under best conditions. But naturally from a lofty point of view they too must be regarded as hopelessly inferior, so that the wonder is that communication is possible at all through such channels; and one would imagine that it must be sophisticated sometimes, in a more or less obvious manner, by the channel through which it comes.

I think therefore that there must be many degrees of influence, from vague intuitions and feelings of one's own, through various phases of mediumship, up to what may be called genuine inspiration, such as, let us say, Saint Paul experienced. And that the amount of personality which gets through depends on us, and on the means available, and on the circumstances and conditions at the time.

It is somewhat like the doctrine of the Subliminal Self as related to incarnation: not the whole of a personality is ever incarnate, only a small portion, depending on the bodily conditions provided; and when the body is infantile, the amount of personality incarnated is extremely small, but still a genuine fragment of the whole . . .

I do not reckon that I often have conscious intuitions, and when I have had vivid dreams they have not meant anything, though once or twice I have recorded them, because I have them seldom. I happen however to have had an intuition this morning, before I was more than half awake, which, though not specially vivid, perhaps I had better record; viz. that an attack was going on at the present moment,

that my son was in it,¹ but that "they" were taking care of him. I had this clearly in mind before seeing the morning papers; and indeed I do not know that there is anything in the morning papers suggesting it, since of course their news is comparatively old. One might have surmised however that there would be a struggle for Hill 60, and I know that my son is not far off Ypres. By the way, I have been told that the Flemish Belgians really do call it "Wipers"; it does not sound likely, and it needs confirmation. I know of course that our troops are said to call it so, which is natural enough.

A well-intentioned but rather credulous man sent Sir Oliver some communications supposed to have been received from Faraday, to whom among other things a question had been put about rainbows.

10 May, 1915

The answer of the *soi-disant* Faraday about the rainbow is of course merely ridiculous. But as a matter of fact, if you had asked Faraday in the flesh for the explanation of the rainbow, I don't suppose he could have given it very well; he was not a learned Physicist in that sense. Stokes could have given it with absolute precision, by aid of a good deal of Mathematics, but nobody would have understood. As a matter of fact he did give it in a much completer fashion than ever before. Newton, if I remember right, gave the first inklings of it. However, if Faraday had been asked questions he would have talked sense.

Sir Oliver was always very sceptical about such cases. To another correspondent, about the same time, he said:

¹ Raymond Lodge, afterwards killed on the Menin Road

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"It is impossible to take these communications at their face value."

In the next letter Sir Oliver refers to his father.

15 May, 1915

You say truly that I have a lot of things on hand. For instance, I have been all this morning finishing and making accurate a prospectus I drafted for converting my father's old firm in the Potteries into a Private Limited Company, in order to be able to find it some capital and get it out of difficulties. It is not a firm in which I have any financial interest—rather the contrary:—but one cannot help taking a filial interest in it.

As a man of business it is just possible that you might be interested to see my draft. If I do put a rough copy in, you will understand that it can be torn up. There are points in it which I have now amended, and one or two misstatements of fact.

But the real work I am on all these days, though only by getting up early in the morning can I find time to attend to it, is the writing of a book called "The War and After": dealing, in three parts, with Past, Present, and Future. This I have felt bound to do, though I confess it has been rather against the grain; and doing it in so patch-work and scrappy a manner is I find exceedingly difficult. I only hope the result will be less unsatisfactory than I imagine.

Sir Oliver was, of course, continually being asked to speak on Spiritualist platforms, but he always declined, at any rate until a much later date. The following note referred to an invitation of this kind, which I declined on his behalf.

LETTERS FROM SIR OLIVER LODGE

29 May, 1911

I have always held aloof from Spiritualistic forms on the unexpressed ground that they are emotional and specifically religious—if that is the right word. My business for the present is to investigate and establish, rather than to emotionalise over things. As far as I remember, I have not spoken even at the London Spiritualist Alliance

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Then there comes the question of the dying. It is true that Myers dreaded that part; he did not like the idea of it at all, and several times spoke to me about it. But I think here also the trouble and pain of dying may be much exaggerated in most cases. I know that when people recover after a bad accident they feel the recovery painful enough; but of the accident itself they have no recollection, and no pain

29 May, 1915

I have always held aloof from Spiritualistic plat forms on the unexpressed ground that they are too emotional and specifically religious—if that is the right word. My business for the present is to investigate and establish, rather than to emotionalize over things. As far as I remember, I have not yet spoken even at the London Spiritualist Alliance, which I suppose is the chief of these platforms, but of course they have asked me many times in the past, though of late I think they have given it up.

The next letter is about something I had said expressing fear either of death or of the physical suffering which might precede it, or of the state of affairs which might follow it—as in Dr Johnson's case.

1 June, 1915

Your remarks on "death" interest and surprise me a good deal. I have come to regard it as a natural operation, certainly no worse than birth, and the transition itself seems to me merely interesting, not perturbing at all, if only surviving friends will not make a fuss and go on grieving as if some elaborate misfortune had happened to one. It *may* be a misfortune, but it is hardly complimentary for them to think so—by which I mean that in some cases it may be a misfortune. I think it certainly is, where people are taken in the prime of youth, at any rate it is a misfortune for this world, if they could have been of service to it. But when people have done a reasonable amount here, and it is time to go, it is not only true to say that there is no use in repining, but I believe there is no cause for repining. It is simply a kind of continuance of experience in new surroundings, akin to a magnified kind of emigration.

Then there comes the question of the dying. It is true that Myers dreaded that part; he did not like the idea of it at all, and several times spoke to me about it. But I think here also the trouble and pain of dying may be much exaggerated in most cases. I know that when people recover after a bad accident they feel the recovery painful enough; but of the accident itself they have no recollection, and no pain is associated with that. Even after half drowning it is the coming to that is painful—the returning vitality—as it is also in the case of a frost-bitten limb.

Last Sunday afternoon I had a most interesting talk with a lady who had been on the *Lusitania*—a stranger quite casually met,—but she seemed so placid and calm about it that I catechized her. She was in the water three hours with a life-belt on; she was then picked up by a boat, in an hour transferred to a mine-sweeper (whose captain made her change her clothes in his cabin into his clothes, thereby probably saving her from rheumatism), and it was after 10.0 before she landed in Queenstown; the outrage having occurred soon after 2.0. She said there was no panic on board, and that any feeling of fear was masked by one of indignation; they felt they must not let the Germans crow over them by seeing that they minded;—a curious attitude, but apparently genuine. As the ship sank, she took to the water, a steward having probably tied on a life-belt, and she was sucked down. When she came up again the striking thing was that the ship had disappeared, and there was nothing to see but a plank, which she caught hold of. She said she was not a good swimmer, but the life-belt held her up very nicely and she felt quite comfortable. The only thing that worried her was the trouble that would be caused to her relatives, and the grief to her young

husband, whom she had left at Bermuda. She longed to be able to send a message to say that it was not nearly as bad as they thought. She did not expect to be saved, but she did not feel to mind and she had no feeling of discomfort—not even, strange to say, of cold; for the sun was warm. Her only trouble during the three hours was lest her relatives should unduly mourn her loss.

Well, that is the kind of statement she made. She was a sensible and very attractive person, and it was clear that she was telling the truth. She was not bragging about it, but I was having a private conversation with her, and was rather digging the facts out. I only got them gradually. It was very instructive to me, and she says also that it was instructive and unexpected to her; she never would have anticipated that it would be so calm an experience, and she now feels that she does not mind dying; i.e. on the assumption, which no doubt she makes, that her feelings then will be not dissimilar.

CHAPTER VII

3 *June*, 1915—13 *December*, 1915

Poison Gas—Proofs of Survival—Telepathy—Imperator—Ghost Club—Hell—Catholic Booklets—Scepticism about Survival—Dyspepsia—Grumbling at Trifles—Wireless Picking-up of Telephone Messages—Death of Raymond Lodge—Possession—Homing Instinct in Animals—Democracy in War—Finite God—Prayers for the Dead.

THE next letter deals with poison gas, the nature of proof in the question of survival, the theological doctrine of Hell, and the real identity of the spirit or secondary personality who called himself "Imperator" in the automatic writing of the Rev. Stainton Moses. The name of this communicator as given to Stainton Moses was kept a close secret for some time, in case it should come independently through some other sensitive and thus afford confirmatory evidence; but it became more or less public property after some years. The name given to Stainton Moses was "Malachi"; but the word in Hebrew means "my messenger," and it is possible that this was what was intended, and not that the prophet himself was to be supposed to be communicating. The claim certainly was that the communicator was a "messenger" from the spiritual world.

3 *June*, 1915

I heartily agree with your sensible comments on Mrs. Fox's request for intervention. Privately I may say that I think it likely that we shall use—not chlorine,

but some other gas, probably acrolein, which chokes and makes your eyes weak, and renders you incapable of resistance for the time, but does no permanent injury of any kind. It is the kind of stuff that you smell in excessively small quantities when a candle has been blown out. Of course we shall use antidotes to the chlorine; but I know that chemists are trying to recommend other less deleterious gases for offensive purposes, and I anticipate that one or more of these will be used. But inasmuch as we do not want to tell the enemy what they are, no doubt the enemy and other people will be accusing us of using chlorine.

With reference to a suggestion for a joint article, I do not think *The Quiver* is worth while; but, as you say, one of the American magazines might be worth considering. If you like to take the trouble some time to write an article I would consider the matter, but I doubt whether it can be managed in that way, and am inclined to think that it is best for me to hold my tongue for the present.

At the same time, what people really ask for—though whether that is what they want or not I do not know—is some indication of the kind of *proofs* which have convinced me. An elaboration of the importance of Telepathy in such a connexion, for instance—at any rate that is the kind of line that I should take, or that I imagine I should take, if I set to work to write such an article. Perhaps an article on the Nature of Proof, or on the kind of proof which would be satisfactory if it could be got, or on the kind of proof which might be expected; together with an indication of how near we had got to the ideal—whatever the ideal was—might be really serviceable. I do not think that people in general

have got to grips with the question, or realize how singularly difficult definite and crucial proof is. The distant telephone analogy, and the Tichborne case, have been worked for what they are worth, but still something on those lines seems necessary. I really think the matter may be worth considering.

I see you want to know who "Imperator" is. Well, the fact is that through Mrs. Piper information was given to Hodgson on that subject which was not very self-consistent, and which was certainly inconsistent with what had been given to Stainton Moses.

Myers showed me privately some stuck-down pages in Stainton Moses's notebooks which contained the statement given, in answer to Stainton Moses's inquiry, through his own hand. This information Myers gave to me in order that I might act as trustee for it in case the same information was given through some other medium, on the cross-correspondence principle—which was always rather strongly in Myers's mind.

Now, as far as I know, no *similar* statement has been made by any other medium; hence the question about the identity of "Imperator" is not regarded as satisfactory. Regarding "Stainton Moses's Imperator" as the original and authoritative one, I have never told anyone who he purported to be, and should not say anything about it now had I not found quite recently that Crookes also had been made a repository of the information, and that he was less seriously disposed to secrecy. I should judge from his conversation that he had informed Sinnett, possibly Percival, and probably others. The fact is that at his invitation I recently attended a meeting of what they call "The Ghost Club"—a small London coterie which seemed

to me of exceedingly small importance and a superstitious body, but of which Crookes is the President, at any rate for the present, and to the dinner of which he had invited me for many years, till at last I succumbed and went. At that gathering they tell each other stories, which are supposed to be confidential but which are sure not to be; and at that gathering I heard Crookes say, in reply to a question, that "Imperator" was one of the minor prophets—he did not seem to remember exactly which. I was rather shocked, and told him so, since this is in accordance with the sealed pages of Stainton Moses's notebook, and since as far as the test of it were a test, it was to that extent given away.

One of them asked if it was Amos, and was answered in the negative. As it has gone so far as that, I think I might stretch a point and say to you which it was; but there is no particular object in doing so—at any rate not in a hurry. I limit myself to the information which has been thus practically published, and which indeed has no doubt been published before, in the same sort of way, possibly more completely.

I am not surprised that you should think it is Marcus Aurelius. I believe that was one of the statements made to Hodgson, and anyhow it is a statement which many people have suggested. Indeed I have heard people definitely assert that it was so. As to the "hell" doctrine, I was brought up under it to some extent; I remember one or two rather sleepless nights after a hell-fire sermon when I was young; but it has so completely evaporated, partly perhaps through my having been through an epoch of complete scepticism, even about survival, that I hardly realized that the idea still bothered anybody. I am sorry now that I sent you any of those abominable

time many people were experimenting on wireless telephony, and I have been told that one such person, trying to receive, picked up all sorts of communications from other people when, I suppose, were trying to send. I do not guarantee the statement, but I know that in my experiments at Liverpool I could pick up lots of communications from ordinary telephone lines, and used to hear people ordering potatoes for dinner, and other absurdities. Hence it is just possible that Wilson's statement may have a basis of fact, though in that case a very uninteresting one.

Thus therefore is a possibility to be borne in mind, in addition to the omnipresent hoax possibility.

The next letter is one of the saddest, all too common at that time. Its quietness and restraint—characteristic of Sir Oliver—make it all the more poignant. It was written from his home in Birmingham.

21 September, 1915

You may have seen in the papers that my son Raymond has been killed. We have no details. The papers wrongly say the Dardanelles, but it was in Flanders, near Ypres near Hoogle. I know you will sympathize.

22 September, 1915

Alas, we know no details, nothing but a bare telegram so far. When we know more I will let you know. Thank you for your letter.

Raymond Lodge had joined up in September, 1914, and was sent to the trenches in Flanders in March, 1915. On 14 September he was struck by a fragment of shell, in the attack on Hoogle Hill near Ypres, and died in a few hours. He was second lieutenant, and at the time of his

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death was in command of his company. He was a young man of fine character and great promise.

Professor William James used to say that "possession" would again "have its innings," because there were many phenomena which nothing else seemed to explain. Sir Oliver thought the same.

18 November, 1915

. . . . I wonder what you make of the barking dog, reported in this month's S.P.R. Journal, and of the German horses reported on some time back. I am sometimes tempted to think that they are most readily explicable on a basis of "possession." It is a question whether possession is a reality, but the Piper things certainly suggest it, i.e. suggest that an alien organism can be used by a mind; and, if so, it seems just feasible that a low-class mind might, under some conditions, be able to animate and actuate, or at any rate stimulate and partially control, an animal organism. The hypothesis is full of difficulties, but the intelligence displayed is not of an animal kind but human. I am inclined to contemplate some calculating boys in the same way, though there the intelligence is in some cases super-human or extra-human. Musical prodigies also seem to me only explicable by a kind of possession.

I wonder what you think of the idea as applied to animals? We have not got to the bottom of animal faculty yet. The homing instinct leads to results quite incredible. Sometimes these results are thought of as legendary, but there are many that are well-evidenced. For instance, my new typist (Miss Walker) was telling us the other evening of a case of a cat which had lived in the West of Scotland, somewhere in Ayrshire, and some members of the

family moving towards London took the cat with them by rail in a basket. But at Carnforth the cat managed to get out of the basket and escape from the train. Carnforth is either in or near Lancashire—the junction for Coniston—yet after a week that cat turned up at its old Scottish home. This seems as puzzling as any of the occurrences which we occasionally narrate to an unsympathetic and incredulous scientific world.

I have no hypothesis able to explain it, but, as everyone knows, such tales are common, and appear to have an undoubted basis.

No doubt all of us have our political leanings, inherited or acquired, but Sir Oliver has never allied himself with any political party, in fact he has no great admiration for the party system itself, as he tells us in "Past Years" (pp. 268-9). But he has inevitably been interested in political systems and tendencies, partly perhaps because all phenomena are interesting to a man of science, and elections and the like are phenomena, as much as earthquakes or volcanic eruptions, which indeed they somewhat resemble—and partly, no doubt, because government policy has a close bearing on education and on science. In the next letter, Sir Oliver has a few casual remarks on the unsuitability of a democratic system to war conditions. But it does not follow that he would have voted for a Dictatorship, even under such conditions.

20 November, 1915

Meanwhile we are realizing the defects of our qualities, inasmuch as the kind of Democratic Government to which we have advanced is really too good for War conditions, and is therefore unsuitable. Something more primitive is required—some strong and resolute unified Authority, such as the Germans have. We may have to fall back upon it as an emer-

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gency step, but it would be a step backwards for everything but war.

I suppose we ought to have sent troops into Servia a long time ago, so as to have them ready to defend the country, and also because of its extreme importance as on the highway to the East. It now seems likely that Germany will get what it has always wanted—an outlet towards the sun and to Persia and very fertile lands whence it can draw good harvests and other supplies. I am much afraid that Greece will be an untrustworthy reed, and pierce our hand.

Conditions everywhere are said to be better than they seem, but they certainly seem depressing enough.

The next letter was in reply to something I had said, disagreeing with the Finite God idea suggested by such writers as Professor William James, John Stuart Mill, H. G. Wells, and others. I found this letter extraordinarily illuminating and helpful, showing the way to a rational tolerance of opinions with which I was not in sympathy.

13 December, 1915

With the general sense of your remarks on a Finite God, I agree, for the conception of a Finite God in an Infinite Universe is necessarily rather absurd. But I think I can explain the instinct which leads people to postulate something that may be called a Finite God: I explain it on three hypotheses, or axioms:

1. That we apply the term "God" to the highest conception that we are able to form, and that therefore the significance of the term differs with the capacity of different people.

2. That our highest conceptions of either God or of the Universe, must necessarily fall below reality, in fact, that our conceptions are necessarily finite.

That of itself may suffice, but I go on :

3. That there are all grades of existences, not only from black-beetle to Man, but above Man right up to Infinity. And that if we acquired a knowledge of these grades, we should, as we ascended, come sooner or later to the conviction that we had reached something so high that we were impelled to call the Being at that altitude Divine, and cease to attempt to go any higher ; being already, no doubt, overwhelmed.

And I would speculate further :

4. That all these grades are utilized in some way or other as agents of the Almighty. And that just as men are given some power and authority—power always combined with impotence, so that they sometimes make a mess of things, and do harm to the people under them—so it may be in some manner with the various grades of existence. I can conceive of some grades high enough to have planetary authority, and to be, as it were, a planetary God : super-human to an indescribable extent, but far short of infinite. I take it that such lofty agents would have difficulties to overcome, and responsibilities, and occasionally failures, especially when they have to rule creatures possessing free-will. And, just as an Infinite Power does not seem to interfere with Statesmen or Emperors when they make their mistakes, so I gather that an over-ruling Power might allow Limitations to have their due effect on a far higher grade of development. And moreover, it may be doubtful up to what grade the really evil and vicious influences are allowed occasionally to interfere. Though certainly we may hope that for the most part their influence is limited to stages of existence not much above humanity.

The existence of evil itself is of course an old-

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standing puzzle, but the solution to my mind is contained in the conception of *free-will*; and as you know, I have written on this subject several times in books already. Anyhow, for better, for worse, evil does exist; and the struggling against limitations, of which we are too painfully conscious, is not likely to cease at our particular grade of existence. Up to what height the struggle may persist, naturally I have no knowledge; but I can conceive its penetrating, in some modulated form, as high as we at present can conceive. And that is why I think people get the idea—the tentative and peculiar and unsatisfying idea—of a Finite God.

13 December, 1915

The sentence in your letter to me—"I am a Catholic"—gave me a shock, but I see that you only mean that you are virtually a Catholic in respect of one particular subject, namely prayers for the dead. I think the Protestant horror of this practice is quite intelligible when you consider the abuse to which the doctrine of purgatory was liable, and how it was used by the Roman Church to extort money in large quantities both from dying persons and from sorrowing relatives. Apart from this abuse, however, the idea of discontinuing prayers merely because transition has taken place, is to those who believe in continuity of existence quite absurd. And, as a matter of fact, the Church generally is feeling its way back to a carefully-guarded incipient practice of praying for all souls, whether of the dead or of the living. But I trust there will be no danger now of reviving the practice as if it were a magical incantation which could be paid for at so much an hour. As a sign of the times, many services were held at churches on All

LETTERS FROM SIR OLIVER LODGE

Souls' Day last, 2nd November I enclose herewith, or perhaps separately, a sermon by Archdeacon Wilberforce which he or someone has sent me, which incidentally touches on this subject

CHAPTER VIII

20 *January*, 1916—18 *April*, 1916

Musical Automatism—Florence Marryat—Mango Trick—Moon's Phases—Joanna Southcott—Sir Bryan Donkin—Hyper-criticality of S.P.R.—Biographies—Epitaph on Materialism—Painful Duty—First Public Reference to the Raymond Evidence—Spiritualism—Maté—Function of S.P.R. not to prove Immortality—Early Workers in Psychological Research.

THE next letter is partially quoted because it illustrates Sir Oliver's possession of the critical faculty which some people have supposed that he lacked.

20 *January*, 1916

I shall shortly be returning Miss X——'s letter to you, and therefore dictate this note to accompany it.

It always strikes me that these over-leisured ladies think a great deal too much of their own affairs, and have but little scruple in inflicting them on other people. However, I suppose it shows a friendly feeling, and so long as you don't mind, I don't, but I hope you don't hold me responsible for these floods of domestic correspondence!

That sister, or friend, of hers, who attended Peters's public discourse in order to make fun of it, must be, I think, an undesirable associate. And inasmuch as Peters certainly takes himself, and is taken, seriously, I can't see any reason for objecting

to beginning with prayers and hymns. However, her statements are all at second hand and quite unimportant, except as signs of the current prejudice. If I didn't happen to know Peters, I might easily be tempted to agree with her mode of putting things, but as I do, I don't.

The remarkable part of her letter relates to the music composition. She speaks of having written Sonatas, but she gives no detail, and I don't know whether she means that she wrote all the parts, or whether she wrote a simplified version suitable for the piano. It would be interesting to see how much harmony and complexity there really was in these dream inspirations. They are no doubt of the same class as the inspirational drawings which some people get, and again a modification of automatic writing, more akin perhaps to xenoglossy—at least for a person ignorant of music or unable to draw. It may also be akin to the arithmetical prodigies. I don't remember to have heard of musical composition of any importance done in this way by a non-musician, though one does hear of executive music being performed. It seems a kind of faculty that might be brought to book. Perhaps she would send you a few specimens of her musical writing, to see what it looks like.

As to Miss Florence Marryat, I must have read her book ¹ years ago, and I met her once in Italy, at Allasio. I found her very imaginative, and I had no confidence in the reality of what she told me. She was full of spiritualistic yarns, but she narrated them more after the manner of a novelist than of a careful observer. One of the things she told me, which I could by no means swallow, was that she

¹ "There is No Death."

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had seen the Mango Trick done under very favourable circumstances, precluding ordinary fraud, so she said; and, whereas the growing tree was generally covered with a cloth, that the cloth in this case was after a time taken off, and they saw the shrub growing before their eyes; they felt it, and found it hot from the rapidity of growth; it fruited, and they gathered the mangoes and had them for supper. I really don't know whether she expected me to believe it or not. I think she was trying how much I would receive politely and without flying at her. This was in the winter of the year 1889, and no doubt I had been talking to her about Mrs. Piper, who had been staying then for the first time in our house at Liverpool, before we went to Italy.

I know I ought to try and abstain from feeling annoyed with these people; on the whole I generally do, but I'm glad I haven't got to correspond with them. It is, however, just as well for me to see their letters occasionally.

I saw in some paper an anecdote, attributed to Sir Oliver, about one of our legislators who, coming from the House one night, and gazing pensively at the moon, remarked to his companion: "How strange it is that we do not know why the moon changes its shape. I wonder whether we ever shall know?" This seemed to me too good to be true, so I wrote asking Sir Oliver whether it ever did really happen.

2 February, 1916

The story about the British Legislator (I believe a member of the House of Lords, but am not sure about that) who wondered if we should ever know the reason why the moon changes its shape, is not my story but Lord Avebury's; he told it me him-

self, and said they were walking across Westminster Bridge at the time.

I heard a curious confirmation of this kind of thing at one of the modern Universities lately, where it was proposed to introduce a "General Knowledge paper for Classical Matriculation candidates. One of the questions suggested was "Explain the phases of the moon"; on which the Vice-Chancellor said it would be quite unfair to ask a question like that; the candidates could not be expected to be able to do it. I have only got this at second hand. My informant did not seem to think he was joking, but serious. You will see that I refrain from mentioning the University; it was not this one.

With regard to Joanna Southcott, I am in much the same predicament as you. I am not impressed by her writings, such as I have seen. But I see no reason why her box should not be opened. My wife thinks it ought to be. I cannot say that I anticipate anything important from it. There are plenty of Bishops about, if Colonials and Suffragans count. It is a curious and rather ingenious condition to have laid down.

Our civilian population endured the German air raids with remarkable courage and calm. The next letter tells how Birmingham regarded one of these incidents.

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excited. There was a good deal of inconvenience owing to the putting out of all lights and the stopping of all trains, and there were some street accidents.

There was always more or less controversy going on about psychical research, and apparently Sir Bryan Donkin had attacked it in some way, in the columns of *Nature*. I do not remember the details, but the following letter refers to the matter.

4 February, 1916

I am interested to hear that Bryan Donkin is falling foul of you. He is a very positively-opinionated gentleman, and has an energetic lieutenant in Tuckett.

I am glad that you like these "scraps" and are not upset by them. The surviving materialists must be allowed their fling.

I do not know the opinion of the sub-editor of *Nature*, but I know that Norman Lockyer, the chief editor, is convinced of the truth of Telepathy—convinced, among other things, by the Zancigs; with whom undoubtedly he, like many others, had a remarkable experience. How much he actually has to do with the editing of the paper I do not know; but if there is any trouble you might appeal to him.

But on the business side, if an editor knows his business, surely he would welcome a controversy which provides him with free copy.

It was polite and proper of the editor to send you Donkin's letter so as to give you an opportunity of replying at once instead of printing it and delaying the reply.

As already said, I occasionally thought that some of the S.P.R. leaders were not quite fair in their treatment of evidence. They seemed to emphasize anything that told against a spiritistic interpretation, instead of stating the

facts for and against without bias of any kind. Sir Oliver's reply was instructive, and I agree with it; probably I did not sufficiently realize the difficulty of deciding between the various ways in which the evidence may be treated.

10 *February*, 1916

With reference to your remarks on Mrs. Sidgwick's attitude, I think that that is due, not exactly to bias against the phenomena, but to an exaggerated sense of fairness which leads her sometimes into unintentional unfairness. I know that she feels the danger of having weak spots to be afterwards pointed out by hostile critics, and about having to admit anything which may seem not to have been fully put in the front rank and emphasized beforehand. Once or twice in the past, the S.P.R. suffered from this kind of trap, especially in connexion with an Indian Judge and his imaginative or doctored anecdote, which I don't wonder they accepted at its face value—an acceptance which they had subsequently to regret.

I think it is on this ground, therefore, that both Mrs. Sidgwick and Miss Johnson should keep a keen look-out for every point of weakness, and emphasize it for all it is worth, and feel it less incumbent on them to emphasize all the good points, thinking that they will take care of themselves.

understood, though it is now impossible to explain. The fact is, that people are so unaccustomed to scrupulous fairness, that they think that when any thing is admitted, it can only be done in a churlish manner and that there must be much more behind which ought to be admitted. It is like the admission of a witness or a counsel in a law-court. The slightest thing admitted against his own side magnified and distorted out of all proportion, whereas the things in favour of his own contention are regarded more like [secretary notes "six words illegible"] to be accepted with salt.

I have often been struck in biography and autobiography how any admission of weakness or fault is jumped on, repeated, and essentially misunderstood; so that a really fair and quite open biography of a man would not convey the impression appropriate to it, but would irremediably blacken his character. Because little faults and weaknesses are generally kept in the background, and overlooked; and they are brought out into the forefront, it is tacitly assumed that they are only the sign and indication of much more heinous things behind.

So much is this the case, that when a man sets to work to write confessions, like Rousseau for instance, it is often said that he had an acquired mania for confessing, and invented things rather than have nothing to confess. It may be so sometimes, for instance in the Romish Church, with nuns and so on. And yet I think that if a human being set to work to exaggerate and dwell upon and retail, not only every incident, but every thought, he or she could, if they liked, make out a pretty bad case for themselves. Especially as, during a confession, the good points are naturally not referred to.

There is real difficulty in dealing with "S.P.R." things, and I never feel quite certain what the right policy is. One alternative is to try and hold the balance so as to give the correct impression; meaning by the correct impression, the one that agrees with the impression which has been produced on oneself by the evidence, taken as a whole, and assuming no bias. But that last unfortunately being a great assumption, this alternative becomes unsafe, except in private, and among friends. In dealing with strangers, and especially with enemies, it seems necessary to over-emphasize every point of weakness. At any rate, that is the conclusion to which the S.P.R. leaders must have come, partly I suppose under the extremely conscientious guidance and influence of Henry Sidgwick; and the fact is a sufficient explanation of the attitude which so many in the spiritualistic camp condemn.

You will see, then, that I think that the apparent bias of Mrs. Sidgwick is not really a hostile bias, but is due to her extreme carefulness to avoid the veriest appearance of bias in the other direction. And in the present state of the scientific world, I am not at all sure that this attitude of the Society may not prove, in the long run, wise. It has, I think, proved efficacious in the past, though it always excited the animosity and impatience of people of such experience as Stainton Moses and Alfred Russel Wallace; so that they either did, or attempted to, break away from the Society in comparatively early times.

I know that my own attempt to hold the balance more evenly, has resulted in my being thought by my scientific colleagues over-credulous; whereas I think that Russel Wallace and W. T. Stead really were over-credulous at times.



Walter Scott

J ARTHUR HILL

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So I suppose there is room for all, and that the only way to progress is for each one to be himself, and act up to his own lights, subject to such advice and guidance as may be forthcoming from people of greater wisdom, whether on this side or the other.

I think it must be difficult for anyone who does not mix much in the world, and who has to deal considerably with letters which come, for the most part, from inquirers or believers, to realize the amount of prejudice and hostility in connexion with this subject which still persists. Prejudice and hostility which, according to some statements from "Myers," continues also on the other side. There is rather an instructive statement to this effect, which I shall be having copied out for you before long, in connexion with the Ulysses Dog episode.

You say your letters are long, but mine are longer! I don't however mind how long yours are, because I find them always interesting, and often instructive.

After Raymond's death Sir Oliver had many sittings with various sensitives, and messages of more or less evidential character came through. As these are given in the book afterwards published as "Raymond: or Life and Death," I will omit letters about these sittings; a full account of each of them was sent to me as they occurred, for filing.

The epitaph referred to in the following letter was a skit at materialism; I cannot find my copy of it, but the letter has points of interest, so I include it.

11 February, 1916

Yes, that epitaph was my concoction, but it was a good many years ago. I'nad'been reading Blatchford and other boisterous materialists who seemed to be chortling over the uselessness and helplessness

and fatal determinateness of everything—the kind of automaton theory once played round with by Huxley and perhaps by Descartes.

But the epitaph was only a parody after all; it was modelled on the lines of an epitaph to the Suakim-Berber Railway, which appeared in *Punch* about that time, namely the time when that temporary track was taken up. Whether that was before or after the Gordon-Khartoum business I do not recollect. I found lots of copies of my parody among my papers the other day, so I send you one.

. . . Is your desk getting full, or have you still plenty of room? By “desk” I mean *case*, or whatever it is you keep papers in. My study, I am sorry to say, is getting bunged up. The alternative of enlarging it is impossible; the other and proper alternative of tidying up and destroying a lot involves a great deal of labour; and I have found in the past, when I have had a fit of destruction, that subsequently I have found reason to regret some of the things got rid of, and still more to be uncertain what has been got rid of and what has not. Unless however I can clear up before I go “upstairs,” I shall be sorry for my executors. I should like to leave things so labelled that they can make a clean sweep of a good many. Meanwhile current things are so numerous that I have not time to look up and arrange the past.

* As already said, Sir Oliver and the family had had through various sensitives what seemed to be evidential messages indicating the agency of Raymond Lodge who was killed in September, 1915, and Sir Oliver felt that he ought to publish something of this, though the idea had its painful side. One does not easily expose to the public gaze and to the sneers of the hostile, such matters as these.

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I quote part of the next letter in order to show that any such publication was painful but was done from a sense of duty. This has not been recognized sufficiently, I think. The omitted part of the letter refers to living people; the "Society" is of course the S.P.R. Sir Oliver was contemplating giving a paper to the Society, about some of the Raymond incidents, as a sort of beginning.

. . . It is rather difficult to know how first to refer in public to the question of my son's survival. One feels rather disinclined to do it at all, but it has evidently got to be done somehow, and through the Society seemed a reasonable way to begin.

The next letter describes a not too methodical way of working!

26 February, 1916

I thank you for reminding me of several things which I had overlooked or even not known about. The fact is I work by strata on my desk for anything not filed away, and if papers or letters get into a lower stratum than that which I dig down to each day, then they may be left there for weeks, unless resuscitated as I propose to resuscitate yours. I have not looked for them yet, but they are pretty sure to be there. It's a bad system of working, and I often try to avoid it, but without success; especially when I have to go off to London and elsewhere, and lose a day, and get snowed up by arrears . . .

The following refers to a visit of a London medium to a Spiritualist church in Birmingham, the medium staying with the Lodges.

anything, and the kind of people who form the "spiritualistic" church here appear to be of the lowest grade of intelligence. It is to me no wonder that Spiritualism is under a cloud, and it is very hard to stand up for the true facts, when they are weighed down by all this mass of incompetence. I suppose they are good people in a way, but goodness, without intelligence behind it, is almost the more trying.

The medium, Alfred Vout Peters, whom I had had staying with me for sittings, was fond of the South American drink known as maté, and I had been trying it. But, like Sir Oliver, I preferred tea.

15 March, 1916

Thanks for the information about maté. I should like to try a little sample, if quite easy you might tell me where to get it. My wife has long had a "maté" cup or gourd with a silver spoon, by which the ladies in Argentina suck it up, standing on balconies in the evening sunshine. I think we have tasted it somewhere, but it is long ago. At present I prefer tea!

No date

By the way, X—— ought to be instructed some time not to call that Society the Psychical Research Society or the P.R.S. That is the kind of thing uninstructed people do, and so it makes a muddle with a number of insignificant mushroom growths which call themselves by that sort of name. The S.P.R. named itself very carefully. And I might go further and say that some of the misapprehension about its activities is due to the fact that people think it was founded either to prove immortality or to examine the evidence for it; whereas it was really founded

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to examine obscure and unrecognized human faculty of all kinds, and to get down if possible to the psychological laws—to make a more thorough and complete study of Psychology, in fact, than had previously been attempted—without any idea of proving anything, and with no more than a personal interest in the minds of a few of the Founders on the subject of survival. That is a thing which has come more to the front as time has gone on. It was always very forward in Myers's mind, but not at all in many of the others. I knew them all, you remember, in quite early days and before the Society was founded, though it was not till afterwards that I got to know Sidgwick. Of the whole group Gurney and Barrett were the first I knew, though which of these two I knew first I do not remember. Gurney used to come to my very juvenile lectures in the early and middle seventies at University College, London. He it was who introduced me to Myers. Barrett, of course, as a physicist, I have always known or known of in a sort of way.

CHAPTER IX

16 May, 1916—30 November, 1916

Spirit Photography—Over use of Psychic Faculties—The Irish Question—Plato—Excessive Grief in Bereavement—The "Raymond" Book—Criticism always Welcomed—Inclusion of weakly evidential Matter—After-death Conditions—Press-cuttings—Reviews

I INCLUDE a portion of the next letter because it makes clear Sir Oliver's views on spirit photography

16 May, 1916

The Crewe evidence certainly seems to be getting stronger, and most decidedly I have an open mind on the general subject. I have not "turned down" psychical photography. I should be sorry to "turn down" anything in a final manner—even astrology or alchemy—though I confess that, for all practical purposes, those things are turned down in my mind. But as to psychical photography, I have good reason to think that materializations are possible, and I assume therefore that they may be photographed. Only, photographs are so exceedingly easy to fake, both by design and by accident, that exceptionally good evidence is necessary concerning any photographic record. I don't know whether you have ever had the opportunity of seeing cinema films. But the most impossible things can be made to

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happen on them, and if they were taken as evidence, which of course would be absurd, those impossible things must have happened.

In a few cases known to Sir Oliver, psychic faculties were over-used, with temporarily harmful consequences. So he issued the following warning.

WARNING

It is necessary to utter a word of warning to those who find that they possess any unusual power in the psychic direction. Every power can be abused, and even the simple power of automatic writing can with the best intentions be used to excess, with resultant harm to body and mind. Self-control is more important than any other form of control, and whoever possesses the power of receiving communications in any form should see to it that he remains master of the situation. To give up your own judgment and depend solely on adventitious aid is a grave blunder, and may in the long run have disastrous consequences. Moderation and common sense are required in those who try to utilize powers which neither they nor any fully understand. Weak-minded and unbalanced and idle people should not attempt anything of the kind. Even those not so classifiable may go too far. A dominating wholesome occupation in mundane affairs is the cure for ill-effects thus brought about. The more unusual or unrecognized the power which an individual feels himself to possess, the more strongly should he see to it that he does not overstep the border of sanity and by weakening his mental grasp, cease to be master of himself. A power, to be useful, must be used in moderation and in accordance with the dictates of common sense.

About this time I happened to mention the execution of Sir Roger Casement and the Irish question generally. I said I thought that we had perhaps coerced too much at one period, but that we had perhaps been weak at other times, allowing Sinn Fein to arm and drill, and allowing Ulster to arm and drill against Sinn Fein. I concluded, however, by saying that I knew no more about it than the average newspaper reader, and that it was absurd to have any opinions. Those in authority knew all the facts, or at least they knew more than I did, so I left it to them. Instead of writing a reply, Sir Oliver returned my letter, with a pencilled note: "I quite agree, them's my sentiments also"

Also about this time, Sir Oliver sent me a quotation from one of Plato's Dialogues, which seems to have given him some comfort. His psychical experiences had led him to the similar conclusion that excessive grief was displeasing and painful to those who have gone. The quotation follows.

EXTRACTS FROM PLATO'S DIALOGUE "MENEXENUS"

Being parts of the speech of Aspasia,
 quoted by Socrates
 in honour of those who had died
 in battle for their country
 400 B.C.

"And I think that I ought now to repeat to you what your fathers desired to have said to you who are their survivors, when they went out to battle, in case anything happened to them. I will tell you what I heard them say, and what, if they had only speech, they would fain be saying, judging from what they then said. And you must imagine that you hear them saying what I now repeat to you:

"Sons, the event proves that your fathers were

brave men ; for we might have died dishonourably, but have preferred to die honourably rather than bring you and your children into disgrace, and rather than dishonour our own fathers and forefathers ; considering that life is not life to one who is a dishonour to his race, and that to such an one neither men nor Gods are friendly, either while he is on earth or after death in the world below.' . . .

" Some of us have fathers and mothers still living, and we would urge them, if, as is likely, we shall die, to bear the calamity as lightly as possible, and not to condole with one another ; for they have sorrows enough, and will not need any one to stimulate them. While we gently heal their wounds, let us remind them that the Gods have heard the chief part of their prayers ; for they prayed, not that their children might live for ever, but that they might be famous and brave. And thus, which is the greatest good, they have attained. A mortal man cannot expect to have everything in his own life turning out according to his will ; and they, if they bear their misfortunes bravely, will be truly deemed fathers of the brave. . . . And such we would have our parents to be—that is our word and wish, and as such we now offer ourselves, neither lamenting overmuch, nor fearing overmuch, if we are to die at this instant. And we entreat our fathers and mothers to retain these feelings throughout their future life, and to be assured that they will not please us by sorrowing and lamenting over us. But, if the dead have any knowledge of the living, they will displease us most by making themselves miserable and by taking their misfortunes to heart, and they will please us best if they bear their loss lightly and temperately. For our life will have the noblest end

which is vouchsafed to man, and should be glorified rather than lamented."

Sir Oliver published a Message to the Bereaved, somewhat on the lines of the Plato passage just referred to.

MESSAGE TO THE BEREAVED

The amount of mourning and suffering throughout Europe at the present time is something terrible to contemplate. The loss to those who have gone over is not to be minimized: violent death while young is a serious calamity—a man-made tragedy with dire consequences—and lamentation is natural and inevitable. But it must be remembered that, from the point of view of the individuals who have gone over, there are many mitigating circumstances. They have done their duty; they have sacrificed a useful career here; they have given up all they possessed; and it will be requited to them. By such a death a burden of sin is lightened; some atonement is made. Good friends are waiting for them; their help can be utilized, and is much wanted, for their fellows who are coming over; and they themselves will continue in the joy of service.

They would like their friends here to recognize that, and not to mourn them unduly; above all, not to consider them as gone out of existence, as extinguished and no longer real. Sorrow at their departure is inevitable, but grief which is excessive causes them pain.

They did their work here, they will do it there; and in good time reunion may confidently be looked forward to. If the truth of these matters was only clearly and widely realized, the mourning would be not only more resigned but actually more helpful.

16 MAY, 1916—30 NOVEMBER, 1916

Death alone is not to man the greatest evil, and in some sort they are happy in the opportunity of their death. This ought to be recognized by those who survive, and we should not grieve unduly for those who have only gone on before us.

OLIVER LODGE

I had seen a good deal of the "Raymond" book in manuscript, and also went through the proofs as they came to me, in batches. I found little to criticize, and apparently Sir Oliver thought I was saying little, out of consideration for him. This was not so, for I was always perfectly—perhaps sometimes brutally—frank in my expression of opinion to him. He took criticism better than any man I have ever known, he never resented it but was grateful for it, because it gave him a new viewpoint, even if he was quite sure he was right and his critic wrong, it taught him something about another mind—showed him exactly how that other and probably more ignorant mind blundered—and thus was informative.

28 August, 1916

All your proofs have now come back. You should take the gloves off when you criticize, and find fault as much as you can. Criticism beforehand is all useful.

Sir Oliver's holiday this summer was not much of a holiday. He was at Gullane, supposedly for golf, but he was kept busy.

The date of the following letter is partly unreadable, being scrawled in his usual style, but it was some time in September, 1916 the name of the month is legible.

I've had rather a terrible month of correspondence about all sorts of things, and no secretary to help. Two bundles of letters arrive each day. I must

arrange differently another year, and get Briscoe up here for his holiday. I have shunted on to you as much as I could, for your leisurely attention. I remember nothing that I need back. And if anything requires my attention or is best written about also or instead by me, please reserve it for Mariemont. I have got the proofs well in hand now. Thank goodness, I've nearly finished. I fear I have been rather cluttering you up with work, but I hope you'll take it slowly and comfortably.

In my criticism of the book in its proof form I had suggested the omission of some parts which I thought would lead the enemy to blaspheme; parts which dealt with incidents evidentially weak, and more or less of family nature, such as the home sittings at Mariemont. Sir Oliver knew well enough that these parts were evidentially weak, and he knew that they would expose him to the jeers of the scoffer; but he felt that it would be dishonest to exclude them, for such exclusion would make the case look stronger than it was. He said in a letter of 13 September, 1916: "The scheme might have been a different one and perhaps a wiser one, but it would have been less complete and might have been even considered less honest. Anyhow, for better for worse, it will be published."

Things about Sir Oliver's investigations seem to have leaked out, for something appeared in a daily paper, and the editor thereof telegraphed to him offering £50 for an interview: "but I declined, because I thought it was a bad way to bring out any incidents, and said that people must wait for my book." (Letter dated 18 September, 1916.)

The next letter is a comment on something I had said about a forthcoming book of my own, to be called "Psychical Investigations"; I had expressed doubt as to how far one ought to give laboriously accurate and very lengthy verbatim accounts, which might make tedious reading.

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6 October, 1916

I wonder if you are right in what you call "laboriously accurate reporting" of Wilkinson sittings? For the Records you most certainly are, but for the book I am doubtful. There is a kind of proverb in Science about "not publishing your laboratory notebook." When a person does publish his laboratory notebook—which of course must be taken rather figuratively—the Paper is inevitably dull. And this applies even to Papers read at scientific societies, still more does it apply to books issued to the public.

It has been the custom of the S.P.R. to put into its Proceedings laboriously accurate reports of sittings; and in so far as they rather aim at cross-correspondences and the detection of meaning in unintelligible scripts, this course is not only desirable but necessary. But, when dealing with the ordinary domestic kind of sittings, especially about comparatively unknown people, it becomes doubtful whether it is the right policy, and as a matter of fact, it wasn't followed in the case of Mrs. Piper completely—a lot of sittings were only abstracted. It is a problem which I have had to face in my own recent book, and I don't at all know that I have solved it; I may have put in too much. Dull parts of a book not only fail to get read themselves, they turn people from the parts which are less dull. A part is often greater than the whole. One way is to publish the whole in Proceedings, and then selections in a book.

I don't of course know how far the dullness you speak of is genuine dullness. But I can imagine that too much of it would be tedious, and the whole matter may be worth your reconsidering at this stage. At any rate, not having seen the MS., I can make the suggestion quite inoffensively. Readers

of books are not in general students, material for students is best recorded in scientific Proceedings. A book I think ought to be readable. A multiplicity of unknown names inevitably raises difficulty.

I have begun to read aloud to the family Wells's last book—"Mr. Britling Sees It Through." I haven't got very far into it yet, but I perceive it is a book of extraordinary insight. It deals with the life in a secluded place in Essex just before and just after the outbreak of war, and exhibits the effect on a cultivated man and family. Wells has ingeniously introduced an American, so as to be able to look at England with American eyes, and I think he is going to work out the whole war problem in its effect on family life and religious belief remarkably well. At least that is what I anticipate. (And except for the absence of any mediumistic portion, the divisions of the book seem to me in some respects rather like those of my own.) However, I can tell you more about it later on. I mention it now in case you happen to come across the book.

I expect that after November we shall be flooded with correspondence, and some means must be taken of postponing answers to some of it. If necessary I will draft a few forms saying that letters will be attended to in due time, but that it can't be done all at once; or something of that sort. I hope, however, that the anticipation of the book will have spread a good deal of the correspondence over this previous time, so that the rush may be less than we expect.

The book "Raymond: or Life and Death" appeared early in November, 1916, and aroused much interest. A few newspapers were hostile, the reviewers being obviously ignorant of the whole subject; but on the whole the reception was more friendly than might have been expected.

24 November, 1916

Yes, some of the weekly reviews have been quite good. I dare say I shall be sending one or two for you to see. The two most hostile ones, I think, are the *Liverpool Post* and the *Birmingham Post*, the latter more illiterate than intelligently hostile, the former quite intelligently and obstinately opinionated.

I have in dim contemplation a sort of Discussion of people's difficulties about this subject and an answer to objections both reasonable and unreasonable. My idea is to throw it into the form of a dialogue, or conversation between several people, after the fashion of Galileo's Dialogues concerning the Copernican Theory (the book, by the way, which got him into trouble with the Church and led to his serious persecution). The idea may not come to fruition; but if it does, some of this criticism and incidental remarks will be helpful as suggesting points for comment and elaboration. I should like, however, to make it a lively book, and just at present I don't feel that liveliness on my part is possible. Hence I dare say it will have to wait. I could have done it twenty years ago much better than I could do it now. I remember doing a "Concert of Europe" conversation once, which struck me as rather good, though I never published it.

I quite agree with you about the exaggerated English fear of priggishness. Among schoolboys it is a perfect nuisance, and the school atmosphere quickly turns a natural and affectionate child into a professional schoolboy, always on guard lest he show his feelings in an unprofessional manner.

The next letter has some interesting reflections on the nature of the after-life. As to the article which called

forth the reflections, I think Sir Oliver rather misunderstood it in some of the details referred to; I was in perfect agreement with his own way of looking at the points in question. Apparently I did drop into vagueness or inexactness in what I said about physics; it is always dangerous for amateurs to say anything about subjects in which they are not expert. Of course I was not advancing any views of my own; I thought I was keeping close to what the physicists were agreed on; but evidently I did not express myself well.

The Milton quotation referred to, is from "Paradise Lost," Book V, finishing at line 500:

"Your bodies may at last turn all to spirit,
Improved by tract of time, and winged ascend
Ethereal, as we, or may, at choice,
Here or in heavenly Paradises dwell."

28 November, 1916

I have just read your article in *Light* (page 381) on "The Nature of the After-life." What I feel greedy about is your excellent quotation from Milton: I would have used it as a motto for one of my chapters if I had thought of it. I remember that Raphael instructs Adam in the Copernican Theory, though in rather a tentative, cautious, and "what-if" manner.

But further on in your article, I find myself thinking rather more materialistically than you do. If people on the other side have "things" at all, they will get used to them and things will feel to them much like "things" feel to us. The way material things appear to us here must be a matter of habit and interpretation. It is hardly likely that things in themselves are *like* the impression which they make upon us—for instance, a blue colour, what is it in itself? I suppose it is something stimulated in us by a physical phenomenon, an ether tremor of certain frequency

wholly disconnected from "blue" or anything like it. And so I suppose a stone or a piece of wood may be regarded in a heap of different ways, and our extremely careless casual impression is but one (and that a very superficial one), among the possible modes of regarding it.

So, I suppose our way of regarding things on the other side as spiritual and highly dignified, and something different from those here, may be one legitimate mode; but as to the people on that side, I suppose things would make the same sort of careless, casual impression on them that things do here, and that the feeling about them might correspond very closely with the old feeling, and the impressions be similarly interpreted.

When you touch on atoms and electrons, I think that you are unnecessarily revolutionary. You say, "we now know this to be untrue." Well, I *don't*. The only word in the previous sentence that can be stigmatized thus is the word "indestructible," by which I expect you really mean "indivisible." Otherwise, even it too is true.

Then, in the next sentence, about electrons: one is apt to think of them as flying at random, but they are really revolving in orbits, probably as accurately defined as are those of astronomy. And, although they are not individually visible and tangible, any more than atoms are, yet the *effect* of each individual electron can be seen—and it is a perfectly physical effect—very much as the effect of each individual atom can be seen: for both are highly energetic things in proportion to their size and mass.

These, I know, are collateral trifles, but you may like to hear from me on the subject.

Then you go on to say that we must not take too

literally descriptions of the other side. Well, of course I don't know, but I am coming to think that what they tell us about their impressions of things on the other side, is not far wrong, even if taken literally. They are not telling us what the things really are, any more than we can tell here what things really are, but they are telling us about their impressions; and if they still have human modes of perception, and I suppose they have (not indeed the same sense organs, but something corresponding and appealing to the same mental activity or intelligence), then, if they tell us that their impressions over there are like our impressions of things here, I do not see why we should not believe them.

I don't know that they have *more* senses than we have—they must have *different* ones—but they need only differ because the substance with which they have to deal is different. The impression made upon the mind may be quite similar. I don't know that I had thought this out before, but the things occur to me as I write to you about your article. They may or may not stand further examination. Some day you can let me know how they strike you.

29 November, 1916

With regard to the accounts of the *After-life*, people have frequently written and spoken to me, wondering why something of that kind never comes through! I tell them that it has come through, but that I don't know what to make of it. Then they say, "Why isn't it published?" "Well," I say, "some is published." But now I learn from you that there are about 100 volumes on the subject in the L.S.A. Library. Hence, the difficulty is not lack of material but difficulty in selection.

16 MAY, 1916—30 NOVEMBER, 1916

The question is asked so frequently that I really think I ought to have a printed answer; and it would not do much harm, for they would not read the books. At any rate, it would put a stopper on the silly questions.

I wonder if you think anything of that sort leisurely feasible?

30 November, 1916

A considerable batch of press-cuttings have now come—too many to be fair to unload upon you as they are. They have accumulated, I did not open them until yesterday, and I am now suggesting to Miss Walker that, when she has any leisure (which will not be immediately), she might sort them out into packages:

Good, meaning those of interest whether favourable or hostile.

Bad, meaning rubbish, such as letters from correspondents and from people who have only read reviews. (Provided always that they don't contain suggestions of legitimate difficulty, in which case they might be helpful in my contemplated Dialogue book, because I want in that to answer even rather absurd difficulties, or shall we say, difficulties felt by novices, but which we have managed to get over.)

And then, there must be an intermediate batch of *Doubtfuls*, which will probably require to pass under your eye.

When they are thus sorted, I hesitate whether to send them to you even in that form, and wonder whether you would prefer to be relieved of them. I find that I myself like to glance through them, quickly, and possibly you may like to do the same. At any rate, there will be time for you to write

LETTERS FROM SIR OLIVER LODGE

to Miss Walker about it, and tell her what you wish

It seems to be the kind of thing that can wait, especially as I have already sent you some of the best, independent of the press cutting agency.

CHAPTER V

6 December, 1916—27 April, 1917

Telepathy versus Communication—"Raymond" banned—
Unpaid Work—Cremation—Hostile Reviews—Priestcraft—
Psychic Knowledge comforting in Illness—Fechner—Bishops

A PHILOSOPHIC friend wrote to Sir Oliver, asking how far an hypothesis of telepathy from living minds might explain the phenomena described in the book "Raymond." Sir Oliver replied rather fully, and sent me a duplicate of the letter so that I should be fully informed about the way in which he regarded the alternative hypotheses. The duplicate took the place of a letter addressed to me, and it saved Sir Oliver's time, I think there is nothing improper in my quoting it. This letter may be skipped by those who have no interest in the various possible theories concerning psychical phenomena.

6 December, 1916

I am very grateful for your letter, and the family will heartily appreciate your opening remarks about the book and its interest, and especially about the letters from the Front. They will be glad to see how they have struck you, and will feel still more satisfied that they were included in the book. Their inclusion might have suggested that we attached to them exaggerated value, but I tried to make it clear that that was not so. Only, as letters from one who was actually in the thick of it at that period of the war, they seemed

to possess a legitimate interest, though they were not in the smallest degree written for publication, nor indeed did I contemplate anything like publication for some time, and then only with qualms

Coming to Part II You raise a very legitimate question, namely, whether telepathy from the other side is a more legitimate hypothesis than a diffuse kind of telepathy or universal mind reading here

I admit the difficulty, we have all always admitted the difficulty—meaning by “we,” the workers of the S P R And the deceased Members of it felt the difficulty in their life time, and have striven hard, by the invention of elaborate cross correspondences, and other devices, to get round it We were willing to stretch the hypothesis of telepathy from the living to the uttermost, until it snapped I do not say that it has been irrevocably smashed in a quite obvious and conspicuous manner, but in the view of most of us now, it has become so weak and thin, that it no longer holds the field, and the other hypothesis has, at any rate for the present, taken its place

The latest of the proofs in this direction has been a classical puzzle set by Verrall and Butcher in conjunction A puzzle which they gave us 18 months to solve, and then sent the solution The solution is complete and satisfying, and, as those competent to judge assert, very characteristic of the scholarship of Verrall and Butcher Under those circumstances (and there are many others of a somewhat similar kind), it is rather a stretched hypothesis to suppose that the whole carefully constructed problem was derived, not from the conscious efforts of a surviving Verrall and a surviving Butcher, but was fallaciously concocted by an unconscious medium, out of a lot

of stray unconscious thoughts, in the minds of living scholars who knew nothing about it, the whole being apparently organized by some diabolical intellect, merely with intention to deceive. Just as some people used to try to hold that the fossils had been placed in the rocks by a six day Creative Power, for purposes difficult to formulate, but, as it seems to me manifestly deceptive.

Furthermore, when you speak of a *vera causa*, you must remember that telepathy has only been experimentally proved to occur, either with experimental intention, or under stress of special emotion, between two or more people, agent and percipient respectively. A vague and diffuse general telepathy has not been proved, and is therefore not a *vera causa*.

But you say, "Then how about your postulated telepathy from the other side? Surely that is big and diffuse enough?" I reply, "No, not at all. It occurs either when actuated by the experimental intentions of Myers and Gurney, or Verrall and Butcher, or else it occurs under stress of emotion and desire to prove the persistent existence of some deceased son, husband, or brother."

I consider therefore that telepathy from the other side falls under the experimentally proved class, and is a *vera causa*, so soon as one grants, what to my physical instincts has to be granted, namely that it is a direct communication of mind and mind, without the intervention of intermediate physical mechanism. I say this because distance and obstacles don't seem to matter. And any hypothesis of brain waves or etherial transmission, is purely guess work, based upon nothing but analogy, which analogy may be, and I think is, false.

To return for a minute to that classical puzzle

spoken of above. Sonnenschein has got the puzzle itself, and also the solution which they gave. So, if you happened to want to see it, you could apply to him. But Balfour's Paper about it all, with I suppose full explanation of the Verrallian and Butcherian touches and fine shades, will appear in the next number of "Proceedings." I have not yet either seen or heard his Paper, but I am greatly interested in the puzzle. Though it is only since he read his Paper that I have heard of it, since they thought it better to keep it within a small circle of some competent people, until they had made something of it.¹

I suppose you have seen the last issue of the "Proceedings."² It reached me on 1 December. There are many interesting things in it, especially Gilbert Murray's Address.

Finally, about Part III. I appreciate your hints on the difficult questions of Free Will and Theology. I don't feel to disagree with anything you have said in your letter. But I do not feel competent to enter into them further just now. My ideas on these subjects are not so deep-rooted as those on some others that I have studied more and longer, and which I suppose are essentially simpler. I feel sure that my treatment must, in many cases, be crude, and, to a philosopher acquainted with so much that has been said, very imperfect and unsatisfying.

And I don't suppose that in this last book I have set down so fully and clearly the stage at which even I have arrived, as I have done in some other books, such as "Man and the Universe," and "Reason and Belief," where at any rate I have tried to indicate my present stage at more length, and possibly with sufficient clearness for so manifestly temporary a

¹ Proceedings, S P R., Vol 29, pp 197, 254, 260, 270

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purpose. I must consider this part of your letter with more care and at more leisure.

Sir Oliver has an eye for the humorous side of things, even when attacked or libelled. The book referred to in the next letter is "Raymond: or Life and Death."

15 December, 1916

I am interested to find that the Aberdeen Public Library Committee have put my book temporarily on the Index; ¹ that is to say, have excluded it from the Library for a time, along, I suppose, with other books likely to corrupt the morals of the young.

Sir Oliver did a great deal of extra and unpaid work because he felt that he ought to. The following is an extract from a letter; he had just mentioned Crewe in another connexion.

. . . In a weak moment, or rather from a sense of duty, I have agreed to go over on Sunday (17 December, 1916), not in the slightest degree in connexion with the Crewe circle, but to talk to 2,000 of the railwaymen there, in the biggest theatre, which they have taken. Not on psychic matters as such, but a usual sort of Sunday talk at their Brotherhood meeting, enlarged by the admission of strangers. These Sunday talks are rather wearing, coming as they do on the top of a week's work, but I find it hardly possible to decline pressing invitations from working men, who probably have but little other religious outlook except in these Brotherhood gatherings on a Sunday afternoon, when they play and sing vigorously, and have open ears for anything of reality which they can get people to tell them about.

¹ Alluding to the *Index Expurgatorius* or list of books the reading of which is forbidden in the Roman Church.

The next letter, on cremation, is self explanatory

4 January, 1917

Concerning your remarks on cremation, I quite agree I am not leaving any instructions either I think that such instructions are often a nuisance It seems to me that those things are best considered as conveniences to the living it doesn't much concern anybody else I can quite understand old fashioned feelings about those things, and that the old traditional methods may be the more soothing, a time of bereavement is no time for new fangled contrivances, unless people are already ripe for them I don't think my wife would like the idea of burning what remains of me at all I wish one could depart altogether, as one does in shipwreck and fortunately for the most part on the battle field, at least so far as relatives are concerned I think that that is a real comfort, though it may not feel so at the time And if the grave is subsequently ploughed up by shell and made unrecognizable, that may be a blessing in disguise too I certainly think that that will be the case with people who are buried near Ypres, or the Somme, or Verdun either

The fact of psychometry seems to demonstrate the clinging of something or other about personal objects in a curious way, though manifestly in a way quite unconscious so far as departed people are concerned At the same time, we don't take much trouble about what is done to our hair after a visit to the barber's, though I suppose a psychometrist could make some thing of it—by what means, I am unable to imagine That is one of the many things on which we have more to learn The relations between mind and matter, and indeed between life and matter, are not half, nor a quarter, nor one per cent, understood

6 DECEMBER, 1916—27 APRIL, 1917

I suppose most people wonder how writers like Sir Oliver Lodge are affected by hostile reviews. All sensible writers are glad to see such reviews if they are done by critics with adequate knowledge, for something can be learnt from them, but all reviews are not of this kind. Sir Oliver has always taken his reviews, whether intelligently done or not, with remarkable calmness and tolerance. The next letter gives an example.

27 January, 1917

The *Daily Mail* has at last noticed the book, in a Daily Mailian manner. It seems to me likely to do the book no particular harm, though I dare say it will chime in with a good many people's prejudices and opinions about it, whether they have seen it or not, especially those that have not seen it.

I shall take no notice of it. It appeared on the 24th, and a cutting has already gone to you.

The explanation of the jocular remark at the end of the next letter is that I sometimes "introduced" one correspondent to another, when it seemed likely that they could be helpful to each other.

31 January, 1917

Briscoe is ill at present, but when he returns I shall try to remember to send you copies of my other books, I mean those you have not had. You can then keep them for a lucid interval or ignore them, just as you like. The only one that I won't trouble you with is the "Lightning Conductor" one, which is a big one on electric surgings of all kinds, and is rather specially technical. It is called "Lightning Conductors," but it covers a great deal more ground than that, and was *indeed the beginning of my investigations on electric waves*. The protection device there indicated is used, I am glad to say, on cables and electric light and

power installations in many parts of the world, though such patents as I had for them have long since expired

I am glad you continue to like "Pioneers of Science" Concerning your question about a cone, I am glad to have it, because it reminds me that many people don't realize the mathematical definition of a cone, and probably think of a cone as something like a conical piece of wood A cone may be defined thus

Take an infinite straight line (for all straight lines are infinite unless otherwise specified), fix any point on it Then cause some other point of it to describe any closed curve The surface traced by the line is a cone Note that it is a surface, not a solid

If, instead of fixing one point, a straight line is moved parallel to itself, the result is a cylinder There is no need for it to be a circular cylinder, or an elliptical cylinder, or anything simple A cylindrical surface may be corrugated in all sorts of ways So it is also with a cone, though unless specially mentioned, a circular (or at most an elliptical) cone is generally to be understood

In the case of precession, the fixed point is certainly the centre of the earth

As for a top, it roughly imitates precessional movement

You will understand more about the prolateness of the moon when you come to the chapter on Tides

I am interested in your various "introductions" You regard yourself as a telephone exchange—take care that you are not also a matrimonial agency Indeed it is a capital thing to be so systematic that you can manage introductions like that I should be quite unable to make the attempt

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The following letter compares the attitude of the Roman and Anglican Churches to psychical research.

17 February, 1917

I am sure you are quite right in feeling that the attitude of the Church is largely regulated by semi-unconscious priestcraft. "Great is Diana of the Ephesians." The Roman Church is fully conscious of objecting to anything that emancipates people from priestly control, anything that renders them independent of the Church is anathema. That is why they condemn private judgment, and many other things.

The Anglican Church occupies an intermediate position, but it is only the extreme Protestants, for instance the Quakers, who have theoretical confidence in private judgment. The Low Church bases itself on the Bible, the High on Church tradition. But both branches base themselves on authority rather than on inquiry. Hence they are naturally hostile to our investigations.

19 February, 1917

I had a long talk with three "Reverends" last night in Sonnenschein's house—Church, Congregational, and Orthodox Unitarian. The churchman was a Bishop, but not the Bishop of Birmingham; he went at 10 o'clock, the other two stayed till after 1 o'clock. So we settled the universe pretty thoroughly.

Both the Non-Cons. had preached on "Raymond" in a non-committal way. All three were chiefly impressed with the telepathic difficulty, and, as "devil's advocates," were prepared to stretch it to the uttermost. Of course I didn't object to this at

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Biblical authority for not suffering witches to live, consider that these raids are also sanctioned by ancient teaching—or at least ought to consider so, if they were logical

An incident referred to in the next letter was as follows
A friend of mine had been reading "Raymond," and was down with pneumonia not long afterwards. But the book was still very much in his mind, and he felt that if he died it would only be promotion, and consequently he did not worry. He recovered, and the doctor said that his placidity of mind had saved him. It may accordingly be said that the book was at least a factor, and perhaps the deciding factor, in his recovery

all. I pointed out that what they were discussing now, was not the reality of the phenomena, but their best theoretical explanation, on which there was plenty of room for legitimate difference of opinion. And I tried to indicate the usual scientific method of arriving at the most probable theory which at any given time held the field, no such theory being infallible or final. I also tried to explain to them the attitude of the scientific materialist, who, not accepting the facts, wasn't bothered by telepathy or any other theoretical explanation. They rather marvelled at this, and detected a resemblance to the theologians of olden time, in which I quite agreed. They seemed rather relieved to find that the theologians had so much justification for what seemed after all merely a human attitude of obstinacy and prejudice, not characteristic of any particular school of thought.

27 February, 1917

. . . I have been reading the Witch of Endor chapter again, for I had forgotten some of the details. It is quite a good mediumistic episode. Orthodox people generally say that the witch was much astonished when Samuel really arrived. I don't see that. She cried out because she evidently got from him the identity of her sitter, and immediately realized that she was in danger because of the police prosecutions which he had set on foot. However, she behaved very well to him, and he got a very good prediction. Though possibly it was of a kind that had a tendency to get itself fulfilled. He didn't quite succeed in killing himself by the way, but was finished off by a fugitive. The bloodthirsty German way in which David carried on his raids is noteworthy. I suppose that the good people who consider that we have

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Biblical authority for not suffering witches to live, consider that these raids are also sanctioned by ancient teaching—or at least ought to consider so, if they were logical

An incident referred to in the next letter was as follows. A friend of mine had been reading "Raymond," and was down with pneumonia not long afterwards. But the book was still very much in his mind, and he felt that if he died it would only be promotion, and consequently he did not worry. He recovered, and the doctor said that his placid-ity of mind had saved him. It may accordingly be said that the book was at least a factor, and perhaps the deciding factor, in his recovery.

30 March, 1917

Thank you for telling me of the incident of your sick friend, and of the book in a sort of way saving his life! People complain that it is too dear, but perhaps under the circumstances it is worth the half guinea.

27 April, 1917

You wrote me a long letter on the 2nd April about various things, the chief of which however was Fechner. You give me information about him which was new to me. My ignorance of Fechner is almost complete, and if I said anything against what I thought to be your Fechnerian ideas, it was only in connexion with the earth spirit notion, or that the earth was a living being, or something of that kind. And all I meant against it was that I had not assimilated the idea yet and was not prepared for it. But I know that it is possible to put things of this kind in forms which carry much more meaning and convey more conviction than a superficial and misleading statement.

does. All I want you to do is to wipe out anything that I said about Fechner, either for or against, and remember that I know nothing about him so far.

I am amused at your attitude to the Bishop of Chichester. He is evidently quite a different type of man from Gore. Gore and Talbot are real people, saintly men and men of intelligence; real leaders in the Church.

Talbot would have been Archbishop of Canterbury when Davidson was appointed, had it not been for a temporary breakdown in health. He has always had a lame leg, and when I first knew him as Vicar of Leeds, used to wheel himself about the house in a Bath-chair, out of which he seemed unable to get without assistance, and practically never did get out of it, at least not for meals. Verrall was in somewhat the same predicament towards the end of his life, and used to lecture at College in his Bath-chair, keeping a man to wheel him to and fro. It seems to me that bodily disabilities tend to improve spiritual capacities.

CHAPTER XI

9 May, 1917—23 July, 1917

League of Nations—Armaments—H. G. Wells—Shaw—William James—Temporary Survival—Controversies—Psychical Phenomena—L. P. Jacks—Proof—*Rationalist Review*—Fechner—Universe the Body of God—Transcendence and Immanence—Dr. Mercier—Myers's attitude towards Survival or Extinction.

AT this time we seem to have been discussing the League of Nations, and Sir Oliver expresses his wish for a Federation of the English-speaking peoples. In the following letter he speaks in curiously prophetic language about the crushing burden of armaments, which the League of Nations and other agencies are making such efforts to mitigate.

9 May, 1917

The ideal that has been in my mind for the last forty years is the Federation of the English-speaking races. John Fiske, of Harvard, came over to this country to preach it while I was at University College, London, and made a considerable impression upon me and others. He implied that it was the kind of thing that must inevitably come about some day, that we could not do very much to help it, though we might refrain from doing anything to hinder it. I didn't expect to live to see so near an approach to it as at the present time appears likely. Federation,

that is Federation of the whole British part of the Earth, seems a much better idea than an Anglo American Republic. I think that the latter would alienate the self governing Dominions of the Crown, I think that Canada and the other Dominions are loyal to the Crown, and that the Monarchy helps to keep them together, it is very necessary in India also, so long as that remains a part of the British Empire. The kings seem to me quite worth the cost, in fact the cost is a flea bite, they don't cost nearly as much as many of the nobility and they work hard for the money.

So does William,¹ though it is true that if we got a William, he would give us a lot of trouble. We might have to cut his head off again, but we should most likely dock his salary, or deal with him in some ignominious fashion. I see that Wells has been writing in *The Times* about a British Republic. But we have got such democracy as is necessary, and it seems to me that for the present any more would be a nuisance. I say, let us leave well alone, and attend to a lot of reforms that really are important. Especially must we get rid of the crazy kind of national economy which results in stinginess for every good purpose, combined often with lavishness and unnecessary waste.

The real danger after the War will be the heavy maintenance charges which will be thought necessary for Army and Navy. And unless wise and comprehensive arrangements are made, necessary they will be. If we could minimize this necessity we should have plenty to spend on good objects.

¹ The Kaiser

9 MAY, 1917—23 JULY, 1917

14 May, 1917

Your quotation from Renan reminds me of Wells's new book, of which I received a copy from him yesterday. It is called "God the Invisible King," and it depicts the God which Wells has extracted for himself and apparently thoroughly believes in. It seems to me rather a striking book, and will have some influence. He has been influenced by William James, and perhaps by Bernard Shaw. He has got vigorous hold of a part of the truth: he has a tendency, like all new converts, to imagine it the whole truth. I think it is nearer to real Christianity than he imagines, but he has been put off by the ecclesiastical ideas and creeds and dogmas and dissensions and minutiae. He represents undoubtedly a certain movement. It is an expansion of the theological excursions at the end of "Mr. Britling."

23 May, 1917

I was very glad to see the proof of your article which is to appear in *The National Review*. I think it will be very useful, and am very glad that they have admitted it. I expect I ought to have returned it before.

Dr. Walter Leaf (Classical Scholar) rather lost interest in the subject on finding evidence, as he thought, that survival was only temporary, and that existence gradually petered out, after the shadowy fashion of the old Greek ghosts. It always struck me as a curious supposition on his part, and an odd interpretation of the fact that contact with earth *gradually becomes less close and clear*. It is however on a par with the biological notion that destruction of the bodily organs destroys the spirit which animated

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perspiration or evaporation from the hand and arm of the medium might be caused by lack of skill on the part of the operator. If there is any lowering of temperature, it ought to be looked for. It is a possibility to be borne in mind. It represents one of a whole class of physical experiments that ought to be made, and could be made, if we had a psychic laboratory. The phenomena as a rule occur in such very domestic circumstances that anything like physical experimentation seems foreign and out of place. It is the kind of thing that Dr. Crawford however might try. Would you like to write to him and suggest that some energy employed in lifting a table might be derived from the molecules of the table, and that in that case its temperature would fall, and might perhaps fall appreciably, especially when rather heavy loads were being raised without much apparent effort on the part of the medium? I think he would not scoff at the suggestion and that it might bear fruit, possibly in some indirect way.

Jacks's contention at the S.P.R. I suppose was intended to put the difficulty of "proof" in an extreme and exaggerated form. I think its intention was rather anti-sceptical than sceptical. The implication being, "You say that you cannot prove the identity of a communicator. No, very likely not, not directly and in such a way that it cannot be criticized. But then neither can you prove your own identity for half an hour together, in such a way that holes cannot be picked in it."

People in general don't mean by "proof" anything of that stringent character, and hence it acts as a kind of *reductio ad absurdum* for their demands and hesitations in accepting the reasonable conclusions of those who investigate the subject.

them. Both depend on the tacit assumption that that which does not manifest itself does not exist.

As I think I have said before, there was always a good deal of controversy going on in various papers and magazines. I was concerned in one that was proceeding in *The Literary Guide and Rationalist Review*, for which I had written regularly in earlier days. When I reached definite psychical conclusions, I asked the editor if he would allow me to state them in his paper, though I told him that they would be distasteful to his rationalist readers. He very sportingly agreed, stipulating that he should get one of his contributors to read my MS. and to write a counterblast in the same issue. This of course was all right, and I admired the editor for his fairness in printing my article.

The first part of the next letter refers to an idea of mine that the energy in the physical phenomena of psychical research was perhaps obtained by slowing down the molecular movements of some piece of matter; this would be detected by a lowering of the temperature of the object. I thought at the time that this was an original idea, but found afterwards that Myers had thought of it, and had mentioned it in "Human Personality," which I had read. I had quite forgotten having seen it there.

13 June, 1917

I admire your ingenious physical suggestion about the moisture on the table when worked in an engineering manner by Raymond. It is a very good suggestion, and had not occurred to me. In fact I had not thought about it. How far it corresponds with anything in fact, I don't know. Maxwell's Demons are the recognized method of superficially slowing down molecules. Whether a control has sufficient power over matter to lower the temperature, I don't know. The cold wind they sometimes produce is a suggestion in that direction. I think that my idea had run rather on the supposition that a little extra

perspiration or evaporation from the hand and arm of the medium might be caused by lack of skill on the part of the operator. If there is any lowering of temperature, it ought to be looked for. It is a possibility to be borne in mind. It represents one of a whole class of physical experiments that ought to be made, and could be made, if we had a psychic laboratory. The phenomena as a rule occur in such very domestic circumstances that anything like physical experimentation seems foreign and out of place. It is the kind of thing that Dr. Crawford however might try. Would you like to write to him and suggest that some energy employed in lifting a table might be derived from the molecules of the table, and that in that case its temperature would fall, and might perhaps fall appreciably, especially when rather heavy loads were being raised without much apparent effort on the part of the medium? I think he would not scoff at the suggestion and that it might bear fruit, possibly in some indirect way.

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I was not very well satisfied with what I said at the S.P.R. meeting. I spoke much better at Dr. Cobb's later in the same evening. But I am rather dependent on "atmosphere" and on what has preceded for any vividness and usefulness in my remarks.

I read your article in *The National Review*, and was glad to see it in that organ. I note now that you are writing in *The Literary Guide*, which is rather a den of lions for a Daniel like yourself. Thanks for sending me a copy of your letter and their reply. I will return it when read.

Later. I greatly admire your letter in *The Literary Guide*, the tone of it is exactly right and appropriate to that organ. They could hardly avoid putting it in under the circumstances, though they managed to get a reply in at the same time. The reply is quite futile and exhibits the writer's desire to catch at straws. He must be rather an ass, as well as careless. But whether the futility of his reply will be apparent to the prejudiced readers of *The Literary Guide* is uncertain, and I suppose improbable. Perhaps it will make two or three of them think.

Fechner has always been—since I first read him—one of my favourites among the philosophers, but only one little book of his has been translated into English, and Sir Oliver did not read German easily, so he never got a really correct idea. Fechner is quite harmonizable with Sir Oliver's own way of looking at the Universe. Indeed I should call Fechner an interactionist, certainly not a parallelist or an epiphenomenalist; but these terms were not used, I think, in his day.

14 June, 1917

I feel as if I could not stand parallelism, but I don't know whether this ought to set me against Fechner!

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I have admitted several times that I know nothing about Fechner, and therefore I suppose you will say that I know nothing about parallelism. I agree. It is a matter of instinct. Neither parallelism nor epiphenomenalism, but interactionism seems to me to contain the clue. I may add that Gurney is emphatic in the same direction. But perhaps you are able to see some way in which Fechner's kind of parallelism and my gropings after interactionism come virtually to the same thing.

That the Cosmos is in some sense or other the "body" of God, or may be so regarded, seems to be more or less inevitable. That is, it is God's mode of manifestation, or one of His modes. Just as our bodies are the chief ordinary mode of manifestation for us, though there may be telepathic and other methods which transcend the body, besides the sense of beauty, of truth, of goodness, and of religion, which appear also to transcend anything associated with bodily mechanism. Transcendence and Immanence are the two complementary aspects both of the human and of the divine existence.

I don't remember having seen the *Contemporary* review of your book. But my opinion of reviewers is rather low anyhow, save in exceptional cases, such as yours and Conan Doyle's and a few others.

18 June, 1917

You may like to see an advance copy of Dr. Mercier's attack. I scribbled an answer to it the other day before breakfast, and polished it up a little during the rest of the day. It is not written out yet, though; I will send it as soon as it is. Not that it is much use writing it so soon, for it cannot appear till Octo-

ber; but it is better to get those things done out of hand.

I confess I have not read the attack carefully, but I see the general lines, and it hardly strikes me as really damaging. I observe a book of his on the same subject advertised, but not yet out. He seems to be a well-known, energetic, and amusingly able man. If you like to keep the article till you see my reply, you can.

I think that the best plan with a man of this kind is not to take him too seriously.

I think this was an attack in the *July Hibbert Journal* on the "Raymond" book.

23 July, 1917

I have just read X——'s letter. It seems to me that there are people of different kinds in the world, some succeed, some fail, some do good, some do ill, some go up, some go down: and the only question for us is to which category do we belong. If we place ourselves in a class we don't like, it is no good complaining that that class ought not to exist. It is bound to exist in a sufficiently complex world, but we are not compelled to belong to it.

I have now read your reply to him.

Your attitude towards existence is a great contrast to that of Myers. He could not bear the idea of extinction, and looked forward to endless possibilities, with an enthusiasm which I have never seen equalled, and certainly have never felt. I don't know that he would have cared to live his life over again, I imagine not, but on the whole, he enjoyed life, and he used to mark in his diary all the days he was willing to have repeated—a habit which he had begun long ago, when

I expect he was trying to keep a sort of profit-and-loss account of the value of existence. For undoubtedly he valued pleasure, and had a hedonistic temperament. Whether this is a matter of mental disposition, or whether it is the outcome of the behaviour of the bodily organs, the liver and such like, I don't know, I am inclined to think the latter. For I too have moods when I want to go out of existence, or imagine that I do. But it is easy to imagine these things when one knows they are impossible: if our ideas could decide the issue, we should have to be more careful. What I am thoroughly clear about is, that suicide is a mistake. And hence I presume that the wish to go out of existence indicates that something is disharmonious or out of order. And possibly this something—probably I think in your case—the thing that is out of order is the mere temporary body. But I expect we also all know the feeling of being rather tired of oneself. However, that is what we just have to put up with, and the sooner we make it worth living with the better. But it is easier to preach than to practise.

And then we must remember that people with the most serious disabilities, Helen Keller for instance, and badly disabled wounded soldiers, seem able to enjoy life keenly. A fact which is very instructive.

CHAPTER XII

5 October, 1917—15 January, 1918

Subject of Bradford Address—Spiritualist?—Income at Marriage—Nature of Controls—Perihelion of Mercury—Edward Clodd—Weekly Wages—Bishop Gore—The Resurrection—An Ethenic Body

SIR OLIVER was coming to speak in Bradford at the Eastbrook Wesleyan Mission, of which Mr Muir was Superintendent Sir A Conan Doyle was to speak at the same place on the Sunday before Sir Oliver

5 October, 1917

Concerning the Muir Address, I had thought of something like the Hampstead Garden City talk, and that is why I gave the title "Work and Faith" But this morning it happens that I wrote to Muir saying that perhaps I had better deal with "The Element of the Miraculous in the Bible," or "The Element of the Miraculous in General," or something rather more like my "Appeal to the Church," if you remember anything about that, which has not been published I thought perhaps it would do as a sequel to Conan Doyle's address But it would be best first to wait and see what he really does talk about, and anyhow I am doubtful, and your letter makes me more doubtful, whether the first subject would not be better than the second If you think so, you might perhaps

5 OCTOBER, 1917—15 JANUARY, 1918

be in time to give Muir a hint to hold up any announcement about the subject, at any rate too definite an announcement. For I never want to feel "bound" beforehand, I like to talk about what I feel inclined to at the time.

I was addressing the "Christian Union" of the students here last night, and then it was that I spoke about the Element of the Miraculous, using as a text an extract from near the end of the first chapter in "Man and the Universe," about the two opposite conceptions of the universe, the scientific and the religious.

8 October, 1917

In the last number of the American Journal S.P.R. there is a good and reasonable review of Barrett's book. I suppose you see it.

By the way, in the last issue of the *Medical Press*, you have said again that you are "not a Spiritualist." I rather want to know on what lines you justify that statement. We all rather resent nicknames, e.g. I object to being called an electrician, and I have always rather objected to being called a Spiritualist, on the same sort of grounds. Because an electrician generally means a man who mends bell-wires and telephones. But I should hardly be able to make a negative statement and deny that I was an electrician. I need not emphasize the parable, but I think it would be instructive to me to hear briefly from you on the subject.

My answer to the foregoing was that I did not go regularly to any Spiritualist Church or Society, and was not in any way associated with anything of the kind locally. So I did not regard myself as a Spiritualist, although I had reached something approaching spiritualistic opinions.

The visit to Bradford was a great success, Sir Oliver speaking to about 2,200 men at the Eastbrook Hall. We had good talks in the evenings. There was—as usual—a newspaper controversy going on, and an opponent had been saying rather venomous things. Talking this over, Sir Oliver remarked to me: “It is what I say that I am concerned about. What other people say is their affair, but if I make mistakes and say silly things, the blame is mine.”

A friend of ours spent one evening with us, and the talk ran on marriage, the friend remarking that he married at twenty two, when he was getting a wage of 22s 6d per week. (He was one of the largest timber merchants in Glasgow.) Sir Oliver said: “When I was a young man I did not intend to marry, I intended to devote my life to science. And when I did want to marry, they would not let me until I made £400 a year. And that year I worked! My word, I did work! And I made £800. That was when I was twenty seven.” It turned out that my friend and Sir Oliver were the same weight, fifteen stone. But the former was only about six feet tall, whereas Sir Oliver was six feet three in his socks, and consequently looked thin.

He left us on the Monday morning. I have a vivid recollection of his kindly farewell. I was in bed—had been in bed for three years—and it did not seem likely that I should get up again. As I have said before, Sir Oliver has always been a man of few words and quiet manner. He came to my bedside, took my hand in both his, patted it, smiled, and said, in a tone of sympathy, tenderness, and encouragement: “Good bye, old man!” No doubt we both thought it *was* “Good bye”, but, as it turned out, I began to recover about six months later.

Sir Oliver had a sitting with my medium friend, Mr A. Wilkinson, on 4 December, 1917, and had good results. They have not been published, and I think it is not worth while to include them here, though Sir Oliver sent me a careful report. The facts are of a type well known to

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those already acquainted with these things, but they would not impress others, for it would be assumed that the medium knew all about the deceased relatives of so famous a man.

Probably many readers of "Raymond" have wondered what, exactly, Sir Oliver thought about Mrs. Leonard's control Fedá. I discussed this with him.

19 December, 1917

. . . Concerning Fedá, there is always the possibility that she, and her like, are secondary personalities. But at any rate she is a personality, and one whom my family feel friendly towards: I don't know that it much matters whether she is a secondary or a primary personality. I am inclined however to be guided by what they say on the other side about these things; they evidently treat these personalities as distinct people. The whole subject of "personality" is a complex one.

20 December, 1917

It seems to me that what you do about correspondence is as right as it can be. I don't want to hear any more about your correspondents as a rule, I was only afraid that you were getting rather put upon in some cases by thoughtless people.

You will, I hope, try and avoid that, and reserve yourself chiefly for the more considerate.

3 January, 1918

I reciprocate your good wishes. I have not had what can be called a holiday, except in the sense of a holiday from secretaries! The result has been that I have been immersing myself in mathematical or rather arithmetical Astronomy, going on with that

Mercury business,¹ and getting into a maze of figures in a rather untidy fashion, so that I got more or less fogged, and in one place made a mistake as to a sign which my brother has now discovered, so that a good deal of the work has to be done again. However, it is a good thing the mistake was discovered before I published. My brother works his arithmetic in a much neater fashion than I do and is not so liable to make mistakes, though even he has made a few. It is quite necessary to get these things checked by some one else. I do not know whether there will be much outcome of it all, but it will be another paper in the *Phil. Mag.*, and not a short one.

I was very glad to get Clodd's book, "The Question: If a Man Die," kindly sent on by you. I have looked through it, and so has my wife. Except for the many carelessnesses and absence of any care in stating the facts, the book is not so bad, though it strikes me as rather feeble. He often considers it sufficient just to quote a statement, apparently leaving the untruth or absurdity of it to display itself to the prejudiced reader. For of course, as a full-blown and long-standing Atheist (which is not a term of abuse), it is undoubtedly full of prejudice. I expect to be

5 OCTOBER, 1917—15 JANUARY, 1918

way, long ago, either before I was married or just after. But I think he mostly attended Moncure D. Conway. I note the way he uses folklore and savage beliefs as if they were hostile: Andrew Lang, as you know, regarded them in the opposite sense. Mercier, I think I remember, was rather betwixt and between.

I have not got on with my projected book at all, I don't feel that I can just yet.

You know, I dare say, that the Tank is in Birmingham now. Yesterday at the request of the Lord Mayor I spoke to the crowd from the top of it, interleaved between the Bishop and the Rev. Arnold Pinchard, who by the way spoke the best, he being used to preaching in the open air. I don't find myself able to talk to a miscellaneous and more or less noisy crowd like that with any effect. But one has to do what one can when one is asked. Money is coming in, but only the large sums make much impression. There was one cheque for a quarter of a million, and two others for a hundred thousand each. The most interesting kind of large cheque was from the Birmingham Small Arms employees, something over a hundred thousand, if I remember right. The main importance of all this is, to my mind, the inculcation of the idea and the habit of saving among people who are in receipt of a weekly wage and generally think that they have got to spend it in the week: a stupid custom naturally growing out of a weekly wage, which I think therefore is a bad form of payment. It is rather of a piece with buying things by the ounce, an extravagant method of supplying a household. Another thing which ought to be altered is the habit people have of buying single penny stamps, and thus consuming the time and energy of people at the Post Offices, when there is such a mass of real work thrown

upon the Post Offices I feel as if I ought to write about this

The following letter shows Sir Oliver's interest in such practical matters as the best way of paying wages with a view to encouraging saving, and goes on to discuss some theological questions which were prominent at the moment, an article on them by Bishop Gore having appeared in some magazine. Sir Oliver expresses some disagreement here, but elsewhere he has expressed great admiration for the then Bishop of Oxford, whom he referred to as a saintly man. So the criticism must not be pressed further than it was meant to go.

15 January, 1918

Employees' contributions to the Tank here were not negligible, they amounted to about three quarters of a million in the aggregate, some firms making it specially easy for them to invest a lump sum, taking it out of their wages for some time ahead. The importance of the movement to my mind is the beginning made towards inculcating a habit of saving among the working class, and the providing of good security for them in which they can easily invest. I hope that this may continue after the War, Neville Chamberlain is starting a Municipal Bank here for the purpose. The weekly wage system is partly responsible for their habit of spending what they earn as soon as they earn it. If they acquired the habit of saving they could become quite important capitalists collectively, and this would tend towards a wholesome kind of conservatism and be anti revolutionary. Besides, it would lead to self respect and a feeling of having a stake in the country, and other wholesome feelings of that kind. The habit of living from hand to mouth and being thrown out of gear by illness or

slack times is a thoroughly bad one, and is bound to involve discontent as well as useless extravagance when money is flush.

Gore's article about Henson, or rather about the Virgin Birth and the Empty Tomb, which are the two sheet-anchors of his faith, is to me a painful one. He is doing the Church harm by it, in general estimation, and yet he is in many respects not only a saintly but a sensible man. There is a want of lucidity in his insistence about the Empty Tomb. The Tomb was doubtless empty enough, but from the S.P.R. point of view the facts, as narrated, prove nothing. If the stone had been in place and the Guard still there, there might have been some evidence of supernormality. A peculiarity of the position, however, is that if the body had been found, the state of mind of the Early Church would have found it difficult to believe in the reality of the resurrection.

I think that Gore must be confused by the Appearances possessing the wounds, or marks appertaining to the body; not knowing that this kind of appearance is common in all such cases, and that it proves nothing of the utilization of the actual flesh for the purpose. What we need is a fuller and completer theory as to how and in what manner these bodily traits are reproduced for edification and identification purposes. It looks as if the ethereal body were something rather closely associated with the material one, and pethaps present all the time, though not sensibly present during earth life. It may be that through your reading or private thought you have some ideas on this matter, which seems to me rather an important one.

The Virgin Birth belongs to another category, and I do not care to discuss that, since the evidence for it

cannot anyhow be good. These things may be quite possible, but I don't at present see what good they are ; and to my thinking they rather spoil and confuse the Christian idea of a complete humanity, in which Divinity was incarnate.

CHAPTER XIII

31 January, 1918—7 February, 1919

A Rationalist's Conversion—Conjuring—Comte and Star-composition—Diet—Greek and Latin Fathers—Pythagoras—Abraham Lincoln—Socrates—Clairvoyance.

THE following letter refers to a Rationalist friend of mine who had had an extraordinary experience with a sensitive in London. He was unknown to the medium, but in the trance his mother purported to communicate, giving much evidence of identity, mentioning her other children by name, and so on. He was completely convinced by this one sitting; perhaps justifiably, but it is a fact that sceptics are rather apt to be convinced quickly when they first encounter real evidence, for they are not aware of the various alternative hypotheses.

31 January, 1918

Thanks for telling me about your friend. His admission that fifteen years ago Clodd's book ¹ would have sounded convincing to him as a Rationalist, shows how unrational the Rationalist attitude is. For there is nothing really convincing in Clodd's book. If analysed it is merely a prejudiced statement making no attempt to be fair. And its convincingness to other people only means that it fits in with their prejudices as it fits in with Clodd's. There is nothing but "wind" to stand up against the facts.

¹ "The Question: 'If a man die, shall he live again?'"

An easy all-round accusation of fraud is no good at all. I do not say that the facts are easy to believe, or that they can be accepted without some first-hand experience; but one would expect people to pay some respect to testimony, and not to be satisfied with bad arguments in favour of their own instinctive conclusions. I should have thought that they might agree with the agnostic position and yet perceive that Clodd's treatment is prejudiced, unfair, and of no service in strengthening their case. In Science, for instance, I can imagine all sorts of bad arguments in favour of the Atomic Theory, or the Copernican Theory, or Darwinism, or any well-established doctrine, and a book of that sort would surely be regarded with contempt and ignored by Chemists, Astronomers, and Biologists.

I must look again at your "New Evidences" for the McCreadie sitting which convinced Mr. J——. I always feel doubtful whether one sitting ought to convince anybody; I must suppose that it was rather an exceptional one. When I remember the time it took to convince me, after innumerable sittings with that admirable medium, Mrs. Piper, I am always rather surprised that people can be convinced so readily, as they sometimes are. However, it is a matter in which everyone has to judge for himself. What I think first-hand experience really does is to make the records of others more intelligible, and therefore in the long run more credible. And that without this body of evidence, obtained through various channels and by different types of people, conviction would be extremely insecure.

Mr. William Jeffrey, mentioned in the next letter, is the Glasgow timber merchant who was at my home when

Sir Oliver visited us in October, 1917. He was a very clever amateur conjurer. He stayed a night at Sir Oliver's in the following February.

28 *February*, 1918

Just a line to let you know that this family enjoyed Jeffrey's visit, and that he was most good-natured all evening after dinner, displaying his card and other tricks, in spite of the unfortunate circumstance that his luggage had been spoilt by the leakage of some material from a broken bottle,—which we jocularly surmised to be a Scotchman's usual "luggage." The fact that he had not his own pack of cards rather added to the astonishing nature of his deceptions. I was very glad for the family to see what could be done by conjuring, in order that they might be on their guard against fraudulent claims for supernormal physical phenomena, if ever they came across them.

15 *March*, 1918

I cannot refer you to the passage in Comte where be instances as one of the things that we should never get to know the chemical constitution of the stars. I think also be mentioned their motion in the line of sight. At any rate that was mentioned as an impossibility by somebody, whether Comte or another. Both these things have now been done by the spectro-scope, and indeed we know more about motion *in* the line of sight than we do about motion *across* that line, partly because the spectroscopic evidence, namely the displacement of the lines, is independent of distance, whereas transverse motion of very distant stars can hardly be observed.

You probably know that a number of double stars have been discovered in this way, especially those close doubles which could never be seen as separate.

The closer they are together, the more rapidly they have to revolve, and therefore the greater is the displacement of their lines, one to the left, the other to the right, because one of the components will be approaching while the other is receding; unless they happen to be revolving in a plane normal to the line of vision. Moreover, the amount of shift of the lines gives their absolute velocities, whereas motion across the line only gives angular velocities.

Likewise, in the case of quick double stars, the opening and closing of the lines gives the period of the revolution, and this, combined with their velocities, gives their distance apart, and that enables their mass to be determined—all quite simply.

The three photographs that you sent have been much appreciated. Mine is on the mantelpiece of the family living-room, and is much admired. They consider it a much better photograph than the previous one that you sent me, probably taken some time ago, and they think it gives a much better impression of you.

In April, 1918, Sir Oliver was at Gullane, Scotland, and met there a medical man whom he had known slightly for some years. This doctor was a vegetarian, a lifelong abstainer from alcohol, and was six feet six inches in height, with proportionate build. He was a specialist in matters of diet, and Sir Oliver was much interested in his ideas.

12 April, 1918

We often stayed up talking after midnight at Gullane, having long talks. He is rather great on the nourishing parts of food, and says that the English system of cooking wastes the most nutritive portions. For instance, he says that the water in which rice has been boiled is more nourishing than the rice, and that the natives of India are aware of this, and were

quite willing to let Europeans have the rice if they could have the water, which by Europeans was thought to be very considerate of them. Similarly, he thinks more of whey than of curds, and of the white of egg than of the yolk; and he says that children and invalids can be completely fed on these four things—rice water, whey of junket, white of egg, and pressed-out meat juice. Vegetables, he says, should be steamed, not boiled, else their best parts go into the water. He also advocates long stewing of food in a kind of glue-pot arrangement, in a thing called the "Gourmet" boiler. He also advocates the Wellbach boilerette, which boils things at higher pressure than normal, thereby cooking beans well, butter beans, for instance, and making even the bones of fish edible. He likewise recommends the use of a hay-box, in which food, having been raised to the boil, is put so as to keep hot for a long time, porridge for instance, and such like.

In these ways he says great economy of food results, and of fuel. I took a note of these things in case at some time we had an opportunity of applying them. There seem to be several appliances for Gourmet cooking, and he approves them all.

In May, 1918, the husband of one of Sir Oliver's daughters—Lieutenant Langley—was killed while flying. The next letter refers to this sad occurrence.

The "teeth" business is in connexion with some extractions which a new consultant had advised, thinking that my cardiac irregularity was due to these abscessed teeth, which indeed turned out to be the case. A general anæsthetic was necessary, and I was weak, having been in bed for about four years; so it was rather risky. I must have said in a letter that I did not deserve immortality, or something of that sort—hence his remark about "upstairs."

25 May, 1918

. . . Thanks for sympathy. The blow has been severe, as it was an ideal marriage—extraordinarily happy with each other. The child was only two weeks old at the time.

However, she knows, as you say, that he is still with her in a sense, and already he has come through; Raymond brought him very quickly. He has sent excellent messages at an anonymous sitting which my daughter Norah had with Miss Ortner. Indeed, he controlled himself. Raymond was on the spot to receive him. There is much to tell you, but I can't now.

I hope for good results from the "teeth" business—it is a trial for you.

I am amused at your idea that you don't *deserve* "upstairs." Doubtless you expect to be kicked into the lowest Hell! Well, it's a bad look out for the rest of us, then!

16 October, 1918

I am delighted to hear that you are making progress. I hope that your gradual resumption of clothing and the vertical position means a permanent and real improvement.

I quite agree with what you say about the Alexandrians and Greek Fathers generally as contrasted with the Latin Fathers. Unfortunately, however, their works are badly mutilated and largely lost.

Pythagoras was another much more tremendous and much more ancient person, and how far the sect of Pythagoras were worthy of him, I don't know.

I am interested to find that you knew about the merits of the Alexandrian School; I had only recently made its acquaintance.

31 *October*, 1918

Lincoln's use of psychic power, whether his own or vicarious, amounted to a good deal more, I believe, than premonition of his death. I think he had information about the doings of his adversaries, and some kind of help or guidance in the shape of an indication when to go forward or of an inhibition when not to—which latter is, of course, what Socrates had.

I cannot remember whence I got this information or impression; it does not seem to come into Lord Charnwood's "*Life of Lincoln*." Doubtless the information will turn up again if we are on the look out.

Sir Oliver was frequently asked to contribute an introduction to some book by a writer whose name alone was not likely to assure a publisher of a good sale. In most cases he had to decline, the book not seeming worthy of publication. Sometimes, however, the matter of the book seemed likely to be helpful to some readers, although it might not be evidential or of any scientific importance. This was so in many manuscripts which presented either automatic writings or reports of sittings in which soldiers killed in the War were ostensibly communicating. The next letter refers to a book of this kind to which Sir Oliver, not without some doubts, had supplied a foreword.

13 *December*, 1918

I was very doubtful about lending my name in any sense to the book, but I thought the Introduction sufficiently critical to be safe. And, as these things undoubtedly do come through from young fellows killed in the War, I see no reason for burking them, I think they are part of the phenomena which we have to take account of. And in so far as many of C——'s

statements were lively and interesting, I thought it just as well that they should see the light. They appear to correspond with some sort of reality, as Macaulay used to say of a bad novel, that, however bad it was, it represented somebody's conception of life. So these statements represent a conception of life which is transmissible through a medium from young fellows who are new-comers and haven't had much experience. What the real significance of it all is, we still have to make out. But if nobody publishes their communications because they don't like them, we have no raw material to work upon. The preachy kind of communications are usually thought more edifying, but they never seem to me of much value, or rather, they are of a different kind of value. It takes all sorts to make a world, and so I suppose it takes all sorts to make the next world; and we shan't grasp its significance until we are prepared to admit utterances of many different kinds.

As to the question of policy involved, and the propriety of publishing at any given time, I am less clear. On that side a more cautionary attitude might be wiser. But it is difficult to know where the boundary is between excessive caution and excessive recklessness. I try to hit the happy medium, but naturally do not always succeed.

15 January, 1919

I am rather interested in Miss Storr's letter and in control by living people. I am sure that we want more experiments at living controls, and one chief point of interest is how much the person supposed to be controlling is aware of the fact. I have had a considerable talk with Piddington lately on this subject. You see, if A. consciously controls B., and B.

gives messages coming from A., that is very straightforward, and means that A. is the active agent. But suppose B. gives messages appearing to come from A., and A. knows nothing about it, then B. must be the active agent extracting information from A., or from A.'s subliminal, while A. is quite passive. Piddington thinks that this often happens, or is liable to happen, with people on the other side. Sometimes they are consciously and actively communicating, like many of these young fellows from the trenches, sometimes their minds are being unconsciously read without their even having the experience of a dream. If some mediums have the faculty of getting information from books, or by the use of clairvoyant methods, whatever that means, they may in their travelling clairvoyance, pick up a lot of miscellaneous information, as Wilkinson does about your people. And it may be difficult sometimes for the medium to draw the line and know whether he is getting it in one way or another. There seem to be all sorts of possibilities even when the information obtained is quite genuine and characteristic, and it may possibly turn out difficult scientifically to establish the continued personal activity of any one individual, however much common sense exhibits that as the most straightforward explanation.

17 January, 1919

I did not mean that Wilkinson was extracting things from your mind, there seems plenty of evidence against that. The suggestion is that he is extracting things either from records or from other unconscious people's minds, possibly deceased, possibly living, but in either case knowing nothing about it, and therefore not actively communicating. The idea is that

Feda¹ may be sometimes doing the same. But anyhow she clearly finds a reservoir of memories to tap, whether the reservoir knows it is being tapped or not. The whole point turns on whether the ostensible communicator is actively or passively communicating. The idea is that it may sometimes be one, sometimes the other. You may say it doesn't much matter, but for a complete understanding it does.

After my teeth extractions, strength began to return and the heart became steadily more regular. I had massage to get the muscles back, and in about seven months I was able to get out of bed and to walk a few paces. After my four years in bed, getting steadily weaker, this was remarkable, and it verified the diagnosis that the whole thing had been due to poisoning from the teeth. The following is a scribbled note of congratulation.

7 Feb, 1919

What excellent news about your health! I do indeed congratulate you, and hope that the improvement will continue with leaps and bounds (in every sense). When you can come here—I was going to say a bed would be ready for you, but that is the last thing you want—a summer house in the garden will be at your disposal, and we should rejoice to have you here for a week. Do come and see Mariemont before we leave it at Michaelmas. (For that is what is probable.)

My wife joins me in rejoicing at your good progress.

¹ Mrs Leonard's Control

CHAPTER XIV

26 February, 1919—14 December, 1921

America and President Wilson—Democracy—Resignation of Principalship—Business Life—Catholicism, Science, and Psychological Research—Visit to Canada and the States—American Women—Removal—Psychology and the British Association—Fire at Normanton House

I HAD shown to Sir Oliver a letter from an American friend who is a distinguished writer and a wise observer. She is personally known to Sir Oliver, and I knew that he would be interested in her views. It must be noted that this was in 1919, when American feeling had turned against President Wilson, for various reasons which we on this side did not fully understand, one nation cannot fully understand the politics of another nation, and moreover we were busy with our own post-War problems. But, quite apart from the question of Wilson and his policy and personality, there is wisdom in Sir Oliver's comment on one of the failings of present-day democracy.

26 February, 1919

I think Mrs X——'s letter, if at all representative of a section of American feeling, as I fear it is, is depressing. It is the notion of equality run mad. Equality should mean equality of opportunity, not equality of performance. If Wilson is only what they now say he is, why the—etc.—did America elect him President? In honouring Wilson we tried

to honour America, assuming they had some reason for electing and re-electing him. Just as in honouring a man, you honour also the wife of his choice.

I really think that the jealousy of Democracy against anyone who becomes prominent is a serious danger. Labour is constantly mistrusting its leaders, especially when the world begins to recognize their ability; they seem to wish to keep everybody on a level of mediocrity. This sort of jealousy it is which leads to assassination when the feeling penetrates to a low-grade and half-cracked brain. Leaders of Democracy appear to be hated and mistrusted while they are alive, and only honoured after death. It is all grossly unfair, and at present I do not see the remedy, unless education may be a remedy. I mean a really wide and sound education.

Sir Oliver had been wishing for some time to resign the Principalship of Birmingham University, but had been requested to continue until more normal conditions should prevail. The war being over in November, 1918, he prepared for final resignation.

Other following letters refer to his lecturing tour in America, which was planned for the spring of 1920.

6 March, 1919

You may perhaps have seen in the papers, at any rate you will see by the cuttings when they come to you, that the fact of my resignation is now public property. It is to take effect in September. But meanwhile my work is heavier than ever, owing to the transition period which is looming upon me and upon the family. It means the breaking-up of this house, the going of myself and wife nearer London, and the establishing of the family in some smaller house near or in Birmingham, where the

boys' work is. I think I must have informed you of this sort of thing before, but it is now public, and the result is that a lot of people seem to think that I am now free to attend to psychic and other matters more readily than before. So that my correspondence has, for the moment, increased. If I have not been keeping you fully informed, please understand the reason.

I shall be sending you one or two things to deal with, some of them of no importance, and one or two more things merely for your information in case they are of interest. I hope that your health continues to mend, that you are feeling stronger and more able to get about, and that you will not feel impelled to attend to correspondence more strenuously than is convenient and healthful. I expect that this for both of us is rather a complicated time.

29 July, 1919

. . . I have practically agreed to go to America next spring and give some lectures, some on Physics, some on Psychics, or at least on subjects akin to psychical subjects, but probably without going into detailed evidence, for which it always seems to me that lectures are unsuitable.

My health having greatly improved, I was uncertain whether to take up business life once more. But it was arguable that my psychical work was perhaps the more important. On the other hand, it was practically unpaid work, for royalties on books and payment for articles did not bring in a living. I mention this because it has been said that writers on psychical research probably make a good thing out of it. If I had written primarily for money, I should have kept to the better-paying side of literature; but psychical research seemed important, and I did not feel

justified in doing other work merely for the money it would bring. But now the same question arose in regard to business. I mentioned it to Sir Oliver.

18 September, 1919

Concerning your future work, I am of course not competent to advise, but I presume that even if you went into business it would not consume the whole of your time. It would seem a pity for you to immerse yourself in business too completely, but a moderate touch with sublunary things might be interesting and helpful, if you feel an inclination to take it up again. I should certainly hope that you would not be compelled to abandon the real work to which you have given so much thought and time, and in which you have succeeded in making your mark and becoming well known.

Real work, to Sir Oliver, was work that helped others or contributed to the extension of knowledge. He had no respect for mere money-makers. Nor indeed had he any respect for titled people who had not earned their title but had inherited it. Even I was rather shocked on one occasion when a certain peeress suggested that her son, Lord X, might join the Council of the S.P.R., and Sir Oliver replied that it was out of the question; the Council required its members to know much more about the subject than Lord X was likely to know! This is a digression, but it is desirable to make it clear that Sir Oliver cared nothing for money or titles except so far as they were earned by service to others or by knowledge.

The following letter is mostly about some articles in the *Nineteenth Century and After*; I quote the part about an article on psychical research.

19 December, 1919

∴ One by a Roman Catholic priest, about the attitude of the Roman Church, in which he gives

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himself away pretty completely, claiming that the Roman Church never opposed the movement of the earth, and only dealt with Galileo because he was rebellious and cocksure and objectionable. His arguments against communication are of the same order; he puts the authority of the Church against them somewhat thus:—Deceased people are either saved or damned. If in heaven, we cannot get at them, and if in hell, they cannot get at us. Angels are occasionally allowed to communicate with the saints, but the only communications we can have are with devils—at which he arrives by a process of exclusion of all the other avenues. It is a preposterous article, not worth replying to. The scientific opponents won't read it, otherwise they would be rather shocked at this kind of support!

Sir Oliver went on a lecturing tour to U.S.A. and Canada in 1920, and wrote me the following three notes:

CANADIAN PACIFIC RAILWAY,

Hotel System.

26 April, 1920

I am getting distracted with correspondence. I have answered some and torn up a lot, and now I must ship some to you. Tear up all you can, but I cannot read or estimate them. I have not been in a bedroom for five nights and there is plenty more travelling in front of me. Everybody unloads their stuff upon me, and "stuff" is usually the word.

And the day after, from the Royal Alexandra at Winnipeg:

27 April, 1920

Here are two batches of more rubbish, or what I expect to be merely rubbish. I have dealt with a

quantity but cannot deal with all. Sorry to burden you.

I have two lectures to give here, then Duluth, St. Paul, Minneapolis, and Chicago; then London (Ontario), Brantford, Buffalo, Toronto (again), Montreal, -Ottawa (Ottawa on the 12th). Then a rush to New York and get on the boat for home. What a time it has been! I am tired of it!

CHÂTEAU LAURIER,

OTTAWA, CANADA.

Midnight, 12 May, 1920

My last lecture is given, and I begin the journey to England to-morrow, going via Montreal to New York. This will probably go by the same ship as I go by. I am none the worse for the experience. My wife is already in New York, having been there a week.

It had indeed been a strenuous time, even if Sir Oliver had been a young man instead of—not an old man, but still an elderly one, for he was close upon sixty-nine. But his energy has always been amazing.

The following extract from a letter is no doubt the result of personal observation during Sir Oliver's tour in the States.

19 July, 1920

... It is in fact rather noteworthy how, throughout America, it is the women who take the intellectual lead while the men are chiefly used for earning dollars, and seem rather dull outside their own absorbing business. I have not noticed this feature in any other country; in fact, in France and Germany it seemed about the opposite, only the feminine business was housekeeping and family, while the men usually

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had some intellectual interests beyond the business in which they were primarily engaged. Some of them remarked to me that Englishmen gave an undue proportion of their energies to business. They felt that of us, and that is just what we feel about Americans. Of course there are always exceptions.

When Sir Oliver left Birmingham he was intending to live near London, and indeed had partly arranged for a house in Hampstead Garden Suburb, remarking that it was bandy for Golder's Greco Crematorium. But this fell through, and he finally fixed on a house near Lake, nine miles from Salisbury. This house is near Wilsford Manor, the country house of Lady Glenconner, afterwards Viscountess Grey. She and Lord Glenconner were old friends of the Lodges, and it was a pleasant arrangement on both sides.

The removal was a harassing business, and in one letter Sir Oliver said he found that there were about four tons of books to be packed up, after he had weeded out all he thought he would not want again.

When he got settled at Normanton House, to which a story had been added to serve as library and work-room, he was without secretary and his powers were thus much handicapped. He got a little local help, but naturally this was much less efficient than what he had been used to. For a long time—all 1921 and for some time afterwards—his letters to me were merely notes scrawled in his own almost illegible writing, commenting on letters sent to me for dealing with, or making condensed remarks about things in general. These hardly lend themselves to quotation. He tried a dictaphone, sending the cylinders to Miss Nea Walker of Birmingham, a former secretary; but it did not work very well, or rather he was perhaps impatient of the apparatus. In one note he says that he had dictated a lot of stuff and then found he was dictating to the wrong side and it was wasted.



Photop 85

SIR OLIVER IN HIS STUDY

6 APRIL, 1922—30 DECEMBER, 1922

John o' London to N.W. Last week's contained one by Lord Riddell, of an "anti" kind.

I have got the magnification arrangement working pretty well now, so that a watch ticking, shut up in a box with the microphone, can be heard after magnification at a distance of 40 yards, so that the noise when the telephone is applied to your ear is like the working of a small engine-house. The main difficulty is that the arrangement is so sensitive to every external sound; but I have got the box enclosed in another box, and surrounded by wool and cushions, and other means of deadening and excluding outside conversation and sounds. But I have not yet succeeded in insulating it completely, or even sufficiently. At first the noise made in the telephone was loud enough to make it talk back to its own transmitter, although the telephone was in another adjacent room. When I say "talk back," I do not mean speech. I mean the kind of *howl* which a receiver and transmitter thus connected is liable to set up. I don't know whether you ever tried letting a telephone talk to its own transmitter. When short-circuited, it produces an absurd kind of howl, which used to interest me a good many years ago.

When people irritated me in America by unnecessary telephone calls, I used to hold the earpiece to the mouthpiece, and let them talk back to themselves; which very soon succeeded in shutting them up. I found no other method quite so effective.

I think the letter from Mr. Robert Blatchford to myself, referred to in the next letter, was about one of my books. Mr. Blatchford, as everyone knows, had been a materialist until he was about seventy, when he lost his wife. This led him to read up about spiritualism and psychical research,

and also to obtain some personal experience, with the help of the well-known medium, Mrs. Osborne Leonard. The results were evidentially good, and he reached the conviction that his wife was still in existence and had communicated with him. The conviction was the result of actual evidence, but it is surprising that the evidence could overpower such long-standing prejudices.

14 April, 1922

I return Blatchford's letter and note that he has been moved to take an interest in the subject by losing his wife. His expression about not "wanting" a future life unless under certain conditions is an example of a popular mode of speech which he must know has no real value. Similarly Richet uses popular and rash modes of expression when writing a popular article. I don't know how *John o' London* got anything out of him, but probably it was something thrown off hastily, and not criticized as he would criticize his own writing for the S.P.R. If the article is more than an interview, he has evidently done it quite carelessly, but it is perhaps no more than a dictated interview. The phrase "There are no Spirits," is a conversational one, meaning that he has never detected any. The use of this phrase for a title to the paper is clearly due to the publishers. They generally assume the right to make a catchy title. I used to be vexed when editors altered my title, as the late Sir James Knowles did in the *Nineteenth Century*, turning my title "Public Schools" into "Public Schools a Public Danger." But I have for the most part given up this particularity—which after all produced no good effect—and let them do as they like.

The next letter was written for the edification of my American correspondent Mrs. X., Sir Oliver suggesting

that I should send it to her to see. He did not wish to seem to lecture her, as would have been the case if he had written to her direct. But he wished to instruct her of the functions of the S.P.R., and the letter gives an admirable account of what the Society is and does. Its attitude is naturally not quite understood by some of the general public, for they like definite statements of opinion. The Society exists for investigation, not for the establishing of any belief or system of belief; it seeks the truth, but is slow to formulate anything in the way of a creed, as Sir Oliver points out.

25 April, 1922

I have now read the gossipy letter to you from Mrs. X—, dated 16 March and continued on 5 April. I am glad you get these letters. She is evidently an able woman, but I note that she has the critical faculty strongly developed, and is not always just in her criticisms. Her complaint that the English S.P.R. does not formulate its conclusions and publish them is essentially absurd. No scientific society does a thing like that. Fellows of the Royal Society, for instance, are investigating the structure of Atoms, and for a century they have examined the credentials of the Atomic Theory of Matter in one form or another, but never has the Society in its corporate capacity laid down the law about Atoms, or anything else. The only corporate action that I know of is that they have decided no longer to accept papers on Perpetual Motion devices, or on things which have been proved impossible such as squaring the circle: that is the commensurable nature of π . It is not the business of Science to draw up a creed. Theologians have attempted this, without very marked success; for the phrases have constantly to be re-interpreted and explained in accordance

with growing knowledge, and this interpretation has never been done even by them in a corporate manner, but is left to individuals

So far as it has been possible, however, the English Society has expressed through its Reports a belief in experimental Telepathy, and Podmore, who represents the right wing of the Society, not only accepted it but rode it to death. Many individual members also have expressed their belief in Survival and in the power to communicate, but other members, like McDougall himself, probably remain still doubtful. The position of the Society is that it has no corporate belief, and I see no reason why it should have, since Science is a growing thing, and ought to remain fluid. To attempt from time to time to cast it into moulds and solidify it would only necessitate the bursting of the moulds at some future time. We don't want a scheme of orthodoxy. All that membership of the Society means is "interest in the subject and a desire that it should be investigated scientifically." The formulation of results must be left to individuals, and it is then an easy matter for posterity to discover flaws in their conclusions and discredit them, or else to find them gradually more and more substantiated, and so for all practical purposes to adopt them.

She truly says that astronomers start with Kepler's Laws, and with Newton's theory, but the Astronomical Society has never laid these down, and if Einstein or anyone else can modify them, so much the better. As a matter of fact we all know that Kepler's Laws are only approximate. Planets do not move in exact ellipses, nor is the rate of description of areas absolutely constant. The Lunar theory and the Planetary theory have now become elaborate treatises, and when all the perturbations are taken into account

the simplicity of Kepler's Laws is barely recognizable. The problem of the three bodies has only recently been solved by G. W. Hill in America, even if his is a complete solution—which is doubtful. And his initial step was to take the orbit of a planet as a hypocycloid instead of an ellipse.

One more thing I would point out to her. The English S.P.R. exists to study human faculty in general, every kind of faculty not fully recognized by ordinary science. It did not set out to *prove* anything. The hypothesis of Survival and the power of Communication came as incidental steps in its progress. There is no sort of terminus to its investigation. The woman is not sweeping the floor to find a lost piece of silver, but is clearing away the dust from a treasure chamber or a cave, in which she expects to find not silver only but gold and diamonds in perhaps unlimited quantity. Though she may rake up a good deal of dust in the process, may meet with many disappointments, and though she may occasionally find sparkling things which turn out to be glass, her business is to go on sweeping in faith, without ever expecting to come to an end, and to leave the appreciation of her discoveries to others. Each new thing must run the gauntlet of expert criticism, and the explorer must go on with the investigation, without being called on to pause to classify and arrange treasures and label them in an authoritative manner. They are probably more useful as current coin than fossilized in museum cases.

I rather expect that when she has succeeded in getting an Address from Professor McDougall she will be disappointed with it. Still, it was a very good thing that he did consent to accept the Presidency of the American S.P.R.

I think that the American S.P.R. is in good hands at present and is doing good work, and I could wish that out of the immense funds that there are in America it could be properly supported. Poverty is a great handicap, but undoubtedly a good deal of faith is wanted before the wealthy people will entrust their money to so speculative and uncertain a thing as Research. That is one reason why Government aid to any kind of Science is so difficult to get; results cannot be guaranteed. New facts crop up unexpectedly and sporadically, and the search for them has to be conducted not like a commercial enterprise, but in a spirit of faith.

30 May, 1922

In the *Illustrated Sunday Herald* for 28 May there is an article by Blatchford of a sensible kind, referring incidentally to your writing. You will probably like to see it.

2 June, 1922

I have now sent you Blatchford's article in the *Sunday Herald*. I don't know whether it is the same in the *Chronicle* or not. I haven't seen the *Sunday Chronicle* and it is difficult to get here. The shops hardly seem to know of its existence. I am interested to hear of the discussion among Clarionettes about Blatchford's apostasy. Things move but slowly. Everybody who touches the forbidden thing is thought to have some kind of softening of the brain. Your and my brain must be pulp by this time.

I am glad you got the Heat Wave at last. We have been enjoying it now for a fortnight. But it is beginning to show signs of breaking up, though it is still very warm.

6 APRIL, 1922—30 DECEMBER, 1922

x

27 June, 1922.

I send you a copy of a sentence from Kant's "Dialectic," copied out for me by F. C. Constable.

It seems to me jolly good, because it quite coincides with my Philosophy, such as it is.

But probably you know it.

QUOTATION FROM KANT'S "KRITIK" (*Bohn's Edition*).

Meiklejohn's Translation, pp. 473 and 474

"The body would, in this view of the question, be regarded, not as the cause of thought, but merely as its restrictive condition, as promotive of the sensuous and animal, as but a hindrance to the pure and spiritual life; and the dependence of the animal life on the constitution of the body, would not prove that the *whole* [*sic*] life of man was also dependent on the state of the organism . . . : and that if we could intuit ourselves and other things as they really are, we should see ourselves in a world of spiritual natures, our connexion with which did not begin at our birth, and will not cease with the destruction of the body."

My attention called to it by F. C. Constable, 27 June, 1922.

Sir Oliver's daughter-in-law, wife of his eldest son, died early in September, 1922. Sir Oliver was of course busy and troubled, and his secretary, Miss Alvey ("H. A."), kept me informed, so I have no letter from him about this time, or referring to his loss. Indeed, in more ordinary times he would say to H. A., if he happened to be going up to London, "Just write and tell J. A. H. about" so and so, and consequently some of her letters are practically letters from him, though I do not include them here except in one or two instances.

25 September, 1922

I am asking the publishers to send you a copy of the June number of *The Modern Churchman*, a magazine which I take in and which I think good. I have asked them to mark two articles, one by Barnes, late Master of the Temple, now Canon of Westminster¹ and the other by Bethune Baker, Professor of Divinity at Cambridge, both of which are good. And the latter says very much what I have either said, or have been intending to say. Even in detail it seems to agree with my own views, and therefore I think it good! The attitude of these Modernists in general is far superior to any Church attitude which I have known previously, though doubtless some in the Broad Church movement may have wanted to say, or have said, similar things, though I doubt if anyone could have said it with the same fullness and knowledge as they can now.

Sir Oliver wrote to me on 30 December, 1922, saying that someone had told him that Emerson's "Over-Soul" and Myers's "Subliminal Self" were the same thing, and asking me whether this was so, he addressed the question to me because I had recently read all through Emerson for the purposes of a small book which I had written. The two are, of course, quite different. The "Over-Soul" is an Emersonian equivalent for "God," while the "Subliminal Self" is the part of the human mind which lies below the threshold of ordinary waking consciousness. Sir Oliver remarks "I don't altogether like the term 'subliminal', the 'sub' part leads to misunderstanding." He meant that the "sub" is misleading if taken as suggesting inferiority, for Myers regarded the "subliminal" as not only the part of the mind that is concerned in dreams and the like, but also as the part that is concerned with

¹ Later, Bishop of Birmingham

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the inspirations of genius. It is part rubbish heap and part king's treasury, as he used to say. Sir Oliver here expresses the feeling of many readers of Myers, and perhaps he was wondering whether "Over-Soul" could be used instead. But he wrote a day or two later, saying that he had read Emerson's essay of that title, and saw that the two were not identical. Myers's use of his term is perfectly correct, for he means only under the "limen" or threshold of consciousness: he did not mean "inferior."

CHAPTER XVI

12 February, 1923—8 April, 1924

Sense of *Déjà Vu*—Energy, Direction, Life—Leisure and its Use—An Arithmetical Puzzle—Crookes's *Life*—Biographers—"Outward Bound"—Controversies—Letter to a Bereaved Person—Miracles—Shaw's "Saint Joan."

MOST of us have at one time or another the experience of feeling that we have "seen this place before," although we know we have not, at least in this life and in any normal sense. The French call this experience the feeling of "*déjà vu*"—"already seen."

My lectures referred to were given to the students of the United College, Bradford, at the request of the Principal.

12 February, 1923

I am rather inclined to try to explain the *déjà vu* by an hypothesis based on the Subliminal Self, and its partial incarnations, with a little overlapping at times. It is rather verging on the Theosophical view, without, as I think, some of its crudities. But the hypothesis is full of difficulties anyway; though in some cases, as narrated, the feeling is too vivid, and the knowledge shown too correct, for a mere vague similarity between one scene and another.

The "two parts of the brain" hypothesis is too mechanical, and by itself quite inadequate. It pro-

ceeds on the false assumption that memory resides in the brain. It may, however, be applicable to the feeling, that some people have, that they know what is going to be said, and which is said a second or a fraction of a second later. But that sort of momentary impression seems different from the *déjà vu*, and may conceivably be a physiological one.

I was very glad to hear that you were lecturing to the Theological Students of Bradford. I saw a notice of it in the paper beforehand, and also you had told me. I see you are going to give another one too. I am sure these Lectures will have a good effect.

The analogy between a formless matter of a nebula and a formless mass of ectoplasm—both of which seem endowed with organizing properties—is curious and suggestive. I rather like it. Also, if the luminosities produced by some mediums are bright enough it would—as Mr. Lund says—be well to examine them spectroscopically: but I expect they would only give a continuous spectrum. If, however, they should ever give a line spectrum it would be decidedly interesting. Those I have seen hitherto have been too faint or else too momentary. But there is a medium in Paris, Erto, now producing luminosities, which Dr. Geley wants me to go and see. I can't go just now; but I will write to him about the spectrum idea, and thank Mr. Lund for the suggestion.

6 July, 1923

I received a letter from you while in Scotland, dated 11 June, making remarks of interest about my *Hibbert* article. McDougall is right in saying

that direction can be altered without work. A train is directed by the rails, but they have no capacity for doing work. Nor is any work done by the sun in moving the earth round it, that is, in deflecting its course into a circle continuously. It is a mere guiding force. When work is done, speed is altered in magnitude, not merely in direction. When motion is deflected without work done, the energy remains the same; but the momentum is changed; and in six months is reversed in the case of the earth. Energy has no direction; it is what is called a scalar. Whereas momentum has direction, and is called a vector.

I have written about this change of direction in several places. It has a bearing on Life and Guidance. Life does not add to Energy, but it directs it. Life and Mind utilize the energies which are available all about, and direct them so as to bring about results which otherwise would not occur; such as Forth bridges and birds' nests and cathedrals and symphonies.

After recovering moderate health I spent rather a lot of time, in the evenings, at a local club, chatting with acquaintances whom I had not seen for many years, and playing an occasional game of hilliards. I felt somewhat conscience-smitten about this waste of time.

The Richet book referred to is "Thirty Years of Psychological Research."

31 August, 1923

I think your conscience might take a holiday for a time about the way you spend your evenings: it is quite a good thing to get about for a bit. The inclination to return to work will come at the proper time.

Certainly Richet's book is not in the same class as Myers's: I hope my review did not suggest such a thing as that! Mrs. Sidgwick was much impressed with his carelessness in many particulars, and considered that it threw doubt upon all his reports. I don't go as far as that; but he is hasty, and has never been trained up to S.P.R. standard.

The fact is that in Science, when giving an account of other people's work, one tries to give the general gist and to interest people in it, but always so as to leave a student with expectation that he must refer to original sources if he wants to study the matter. The ground to be covered is so large that anything like second-hand information has to slur over some details, and is not expected to be absolutely complete or precise. Though certainly in giving a report one tries to see the theoretical bearing and put something new into it, if one can. A publication called *Science Abstracts* is full of work of this character, and is very useful as a summary and as directing attention to what is being done, without claiming to give anything like full details. At the same time a reporter ought to be careful about spelling names and about dates.

I rather regret Doyle's decision—if it is a decision—to set up a Spiritualistic Church in London. But that I suppose is a natural outcome of his missionary activity. I suppose he regards himself as a sort of Wesley or Whitefield.

About this time Sir Oliver sent me a curious arithmetical puzzle, which quite baffled me, so he sent the explanation.

LETTERS FROM SIR OLIVER LODGE

COMMON LONG DIVISION

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The problem is to construct the whole sum from the solitary seven.

There is no need to attend to the dividend at all, if we can get the divisor and quotient. Take the quotient. It has five digits, of which the penultimate is obviously 0, because of the need for bringing down another digit from the dividend. The length of the products produced by the other digits in the quotient are separately exhibited; the first and last have four digits; the two middle ones have three. The first of the three-digit products is the result of the factor 7, and it is small enough to leave a three-digit remainder, when subtracted from another three-digit figure. It may be anything therefore from 700 to 888. That is all we can tell about it so far.

The other three-digit product is bigger, being nearly equal to a four-digit figure, since it leaves only a two-figure remainder when subtracted. The factor responsible for this product must be 8, since it has to be bigger than 7 and must be less than the only

possible remaining factor, the one responsible for the four-digit products—which must be 9. Hence we conclude that the quotient is 97809.

Now the divisor. It is a three-digit number, and when multiplied by 7 it still has only three digits. This limits it to something below 150. But when multiplied by 8 it still has only three digits; this limits it to something below 125. At the same time this last product only just escapes having four digits, the two-digit remainder being now seen to be necessarily either 10, 11 or 12. For if it had been 13, there would have been no 0 in the quotient. Consequently 8 times the divisor must come within less than 13 times of 1000. The only number which satisfies that condition is 124. For $8 \times 124 = 992$, whereas $8 \times 123 = 984$, which is 16 short of 1000, and therefore too small. Hence finally the divisor must be 124. The rest is only verification.

It is perhaps curious that the quotient can be obtained without attending at all to the figures in divisor or dividend.

The book referred to in the next letter was the *Life of Sir William Crookes*.

23 November, 1923

The Times reviewer was, I thought, a scientific man, as he seemed to be fairly informed about things and about the general attitude to Crookes's personality. Nobody knew—certainly I did not—whose son he was; and that would have made no earthly difference. Faraday was the son of a blacksmith. As you say, it is absurd to emphasize these things. And as to my remarks on his personality, the fact is that if a biographer says anything in the slightest degree cautious or disparaging, that is pounced upon

and emphasized quite out of proportion. Hence it is that biographers have to be over appreciative, because over-appreciation is expected and depreciation is not. It makes one of the real difficulties in autobiography. If anyone confessed to a minor fault, that would be seized upon and repeated in every review. It is like the "whisky and cigars" episode in "Raymond"—which, however (by the way), the author of the play "Outward Bound" has also apparently seized upon, and as far as the dramatist can, justified it. For in that play the Examiner, finding that the habitual drunkard was in a collapsed condition and unable to plead anything, handed him a glass of whisky, telling him to pull himself together—an episode which my wife specially noticed as rather pathetic and touching; though whether my account of it, as here given, conveys the right impression, I don't know.

There is an old story of an Irishman who, finding a street brawl in progress, asked whether it was a private fight, or might he join in. The Rationalist papers frequently attacked psychical research in general and Sir Oliver in particular, and on some occasions I replied more or less in his stead. The next letter refers to one such occasion. I had asked whether he would like to keep it a private fight, or might I join in.

26 November, 1923

Thank you for copy of your ingenious and excellent letter to *The Freethinker*. I hope they will put it in. I quite appreciate the intervention of an outsider in what is not by any means a private fight. I very seldom think it worth while to write anything in *The Freethinker*, but I do take the opportunity occasionally, because there, at any rate, one is not

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preaching to the converted; and there is some hope that an occasional reader may be led to think it just possible that he is in some respects mistaken.

I include the following as a fairly typical letter to a bereaved person in America. We had much correspondence of this kind to deal with.

10 December, 1923

My Dear Sir,

I am grieved to hear of your bereavement, and would be very glad to help if I could. As I was very busy when your letter arrived, I asked my sympathetic friend, J. Arthur Hill, to reply to you in the first instance.

I would urge you not to give way to despair, but to realize that your wife is still with you at times, and is hoping that you will not grieve over-much at the temporary painful separation; but will concentrate on your work here, and try to pick up the threads of your life again, and keep yourself worthy to rejoin her when the time comes. If you give way to grief unduly, it will pain and distress her. She will be aware of your loving thoughts and will strive to help you. After all, the episode of earthly existence is not very long, though it seems long at the time; and you will be glad to have nothing regrettable to look back upon.

You might set aside a short portion of each day, say a quarter-of-an-hour in the early morning, or any other peaceful time, to think about her; and for the rest of the day do the work that has to be done.

As to a medium, I am afraid I cannot tell you, of my own knowledge, of any in your part of the world. In this country I could have managed a reliable

interview; but it may be that one of the secretaries of the New York S.P.R. might be able to tell you of one. At any rate I will ask if they have any useful information.

Meanwhile I remain, with much sympathy,

Yours sincerely,

OLIVER J. LODGE

About this time I was asked to address a number of young people belonging to a local Wesleyan church, on the subject of miracles; that is, the miracles recorded in the Bible. I had mentioned this* to Sir Oliver, and the next letter contains some comments on these matters.

30 January, 1924

. . . I am interested to hear that you are giving a paper on "Miracles." The authenticity of a *few* of the miraculous accounts I gravely doubt—the money in the fish's mouth, for one; the cursing of the fig-tree, for another. For this last, I think, was probably the outgrowth of a misunderstood and subsequently decorated parable. The water-into-wine bears some impress of invention, especially the complimentary remark of the governor of the feast. The feeding of the five thousand and of the four thousand is spoilt by repetition, and by arithmetic about the baskets; and moreover I find it rather incredible as a statement of fact, especially in view of the rejected temptation about the stones at an earlier stage of the Ministry.

By the way, it struck me the other day that a wicked thing is recorded of Elisha, when, having the power to cure leprosy, he inflicted a loathsome and hereditary and contagious disease unnecessarily on Gehazi and his heirs for ever.

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Some of the miracles are authentic and reasonably acceptable. For others I have an instinctive dislike. Whether this is of the slightest importance is another matter.

Sir Oliver liked good plays, particularly those of G. B. Shaw. In a letter of 8 April, 1924, speaking of "Saint Joan," he says: "It is a magnificent play. . . . It is one of the big things of our time." I mention this *à propos* of nothing in particular, but merely because I find the above short but interesting comment in a letter of this period. He was fond of reading aloud to the family in an evening, and would often choose a play of Shaw's for that purpose.

CHAPTER XVII

10 July, 1924—15 April, 1925

Visit to Sir Oliver—P G Wodehouse—Democracy—H G Wells—Finite God—J S Mill—Fogs—Faith Healing— Lourdes—Zancig—Theology inevitably Anthropomorphic— Ether—Fresnel—Fizeau—Beginnings of Life—Kelvin

IN May, 1924, I visited Sir Oliver at his new home at Normanton, staying, however, in Salisbury. We had a pleasant Sunday afternoon and evening with the Lodges, and much talk on all sorts of things, physical and psychical. He took me into his laboratory, and we stood near a dynamo, talking about electricity. He put a lump of iron into my hand and switched on the current, the iron jumped from my hand to the poles of the magnet. "Switch off!" said Sir Oliver. I did so, and the iron dropped with a great clatter. "We think it wonderful," said Sir Oliver, "that the magnet holds the iron up, but it is equally wonderful that it falls when the current is switched off. We do not understand Gravitation." He was at the time making a special study of the Ether and Gravitation.

I remember being rather amused with Sir Oliver's costume. He had telephoned that he would come to fetch us himself, in order to point out things of interest on the way, and I expected to see him in sober black, with morning coat, as becometh a Cathedral city on the Sabbath Day. I found him in light fawn golfing suit, in which he looked a very splendid figure of a man, though a trifle incongruous in Salisbury. However, he looked all right for the grounds of Normanton House.

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Lady Lodge looked rather frail, but was sweet and gentle in manner, and one could see that she must have been beautiful in youth, as indeed I knew was the case. She now had the beauty and peacefulness of age. She showed us her studio and many of her paintings; she had been at the Slade School when she was a girl. In conversation about things in general she told me that at first she had had no interest in psychical matters, but that now she had come to share Sir Oliver's views, and was very thankful for the knowledge she had acquired, with its comforting assurance of survival. Sir Oliver and I walked about the grounds, then sat in the summer-house where he worked with his secretary when the weather allowed; we talked mainly about psychical things, comparing experiences, and the like. This summer-house is illustrated in the little book "Why I Believe in Personal Immortality."

Sir Oliver's son Alec was there, and two daughters—Mrs. Langley and Miss Norah Lodge. In the evening Mr. Alec Lodge gave us a cinematograph show in the dining-room, of a film which he had taken during the visit of some of the family to the South of France.

P. G. Wodehouse is a great favourite of Sir Oliver's. He showed me a row of Wodehouse's books, on a shelf in his library, and I noticed that he had not got a copy of "A Damsel in Distress," so I said I would send him mine. The next letter refers to this book.

10 July, 1924

I meant to have written when I returned that book you lent me, to say I had enjoyed it very much. I read it, I believe, twice, partly for the tale and for the absurdities, and partly for the construction. The way he brings people in is in some respects farcical, but in others artistic. I still think that "Jill the Reckless" is the best he has done. I have ordered another copy of "A Damsel in Distress," because I like to have his books to lend to people here. I am

now reading "Piccadilly Jim," which is an early one, and as far as I have got, not so good; though it made him known, being in what was then a new vein of humour.

23 July, 1924

I have never yet acknowledged your sending of *The Yorkshire Observer* of July 16th, containing your thoughtful and eloquent Article on "Democracy."

I see you claim for democracy pretty much what I heard claimed for it long ago (at least so I understand you), that it has the faculty or power of choosing the right man for leader, that it cannot decide measures but can decide on men. Only you carry it further, and treat it as a subconscious power. The worst of it is that people seem likely to be overborne by a plausible demagogue, and liable to crucify or burn many kinds of virtue. I suppose it is necessary to trust to democracy in the long run; and at any rate the effort to govern is educative. But it is a long, slow process, like the struggle for existence and survival of the fittest, and must lead through ups and downs and mistakes. I presume it leads to a gradual growing race-experience, and there must be some kind of inheritance of race-experience, notwithstanding that it is an acquired character.

But to me it is all rather puzzling. And I could not write as optimistically as you do on that subject without invoking and trusting to conscious guidance from Higher Powers. To me it seems that *vox populi* is very far indeed from *vox Dei*, and mob government would be awful. A mob is more likely to be influenced by Machiavelli and Caiaphas, whenever they act in combination, rather than by Mazzini and Emerson and St. Francis.

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Nevertheless your article is quite interesting, and I hope its view is justified.

My article of course was not intended to be dogmatic, and indeed was written rather as a stimulant. There is much to be said on all sides of all questions.

About this time I had been reading H. G. Wells's "God the Invisible King," which interested me greatly, although the idea of our deciding that God is finite strikes me as distinctly funny. We are too small for such decisions, and indeed we are often the slaves of our own words.

1 September, 1924

I quite agree with you about the Finite-God idea. It is ridiculous for people walking about on one of the planets to form limiting conceptions of the whole Universe. The *co-operation* idea is of value, but in my mind is amply accounted for by the gift of free will, without any necessity for finiteness or helplessness, except that which was, so to speak, consciously and purposely accepted, as a direct consequence of the gift.

I remember, long ago, reading in (I think) Mill's "Logic," which at that time I studied carefully, his quoting with approval, *à propos* of unremedied evil, the old dilemma:—

*Aut non vult, aut non potest ;
si non vult, non est bonus ;
si non potest, non est omnipotens.*

But I did not know that he had further developed this rather crude and elementary, though plausible idea, in his "Essays." Not so superficially and easily can the problem of existence be solved, or even stated.

10 September, 1924

Thank you for letting me know about the Brotherhood meeting. I have no objection at all to people saying things about me, whether good or bad, and if they say things over good, the audience naturally takes them with salt. I hope that they do similarly when things bad are said. We are all rather a mixture.

With regard to fogs. You know, I expect, that I never really advocated dealing with London fogs in that way. They oughtn't to be produced. And even for harbour and sea fogs (with which I did hope once to get people to deal), effective electrification in the open air would have to be on so large a scale that success is problematical. What does answer is the deposition of metallic fume and other suspended matter in furnace gases. That is being really applied on a fairly large scale, owing to the enterprise of my sons and of Dr Cottrell. But naturally it is all done in an enclosed space, viz a very large depositing chamber, as the gases stream through—hot and fierce and rapid. My son Lionel is travelling in the North about it now, inspecting apparatus already erected, and getting orders for more.

None of this, however, seems to have any reference to your Address on religious matters. I only mention

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philosophy of the middle-aged has been defective just on that ground. He seems to think a lot of Whitehead, both as a man and as a philosopher. I do not know him (W.) as well as I should: and his books are certainly hard to read.

10 October, 1924

I return *The Times* letter. I was only saying this morning how ridiculously ready people were to take *anything* as hostile evidence. They actually take "Sludge the Medium" as evidence! I have had it several times thrown up as evidence against Home. Any kind of assertion, so it be of a damaging character, seems to be swallowed whole, no matter how third-hand it may be, or even whether it is applicable at all.

There had been some services for healing at a Bradford church (Church of England) and there had been a certain amount of Press correspondence, etc. I had told Sir Oliver about it.

27 October, 1924

. . . As to the cures, I wonder what happened ultimately to the man who "took up his bed and walked." We seldom get the future history of these cases. But Dr. Carrel, of the Rockefeller Institute, was much impressed by his Lourdes experiences, and was allowed to diagnose some cases, both before and after. He was a materialist, but it had given him furiously to think. Four years ago he was thinking of publishing, some time, after delay; but I have heard no more. He is an eminent surgeon.

In some paper which I had seen, Mr. Zancig said that the "telepathic" performances of himself and wife were done by code. I asked Sir Oliver what he thought, know-

ing that he had seen the performance, perhaps more than once. On one occasion Sir Oliver arrived late, and Zancig was looking at an object which someone had given him. He glanced up and saw Sir Oliver. Immediately Mrs Zancig said "Oliver."

I had just seen a similar performance by the Zomahs. I showed Zomah a chessman—a white knight—and the lady said "A chessman." I prevented his speaking further by calling out, myself, "What man?" She said "King." I said "Wrong." Then she got "Knight," and when I asked what colour, she said "White." But this proves nothing. It looked like a coding of the letter K, and there was only king or knight for it, and the correct colour might be chance.

4 November, 1924

I put no faith in Zancig's explanation. I was aware that he knew many codes. He told me so, but he assured me that there was a Power beyond, and I think there must have been. What is more to the purpose is that Baggally thought so too, and Baggally made many tests, many of them in private, and is pretty shrewd. Zancig's account of his mentioning my name is not exact, it is only there or thereabouts, and I don't believe he coded it. Besides, what was the good? He had to say it was wrong—unless he wished to impress me personally on the spur of the moment. I think if his whole performance was done by a code, it was almost miraculous: the quickness and the completeness were so great.

There were several imitators who grew up after Zancig. To some of them Baggally and I went. He detected their method forthwith. They were slow compared with the Zancigs, and he was able sometimes to tell me the result before it was arrived.



Topical Press

SIR OLIVER TAKING EXERCISE

10 JULY, 1924—15 APRIL, 1925

at by the performer. In your case it looks as if "K." was signalled—which may be done in various ways. One always has to be on one's guard against experienced performers: and I never thought it wise to base anything on the Zancigs. All the same, I am inclined to think they had telepathic power. I remain doubtful, however. Baggally was more convinced than I was.

16 March, 1925

Thank you for your hint on Theology, with which of course I sympathize. I am by no means dogmatic on the subject, and I agree that any anthropomorphic aspect of Deity must be very inadequate. But as we seem unable to form any conception other than anthropomorphic, I think that Theology becomes too vague and indefinite to be useful on any other lines. One might equally object to the attribution of Love and Fatherhood to the Deity: yet that has to constitute the basis of our Theology if we follow New Testament guidance.

I feel that Effort and other things exist in the Universe, and that Effort is probably felt by very lofty beings. I judge that even some element of suffering is felt too. What the real truth in these matters is, naturally I do not know. But "My Father worketh hitherto and I work," strikes me as an inspired saying; and in any practicable Theology we can only make approximations to the truth.

However, I fully admit that caution is necessary in any attempt to formulate what is beyond our grasp.

2 April, 1925

I don't think our difficulties about the Ether Body will be removed until we know more what Animation

means. Undoubtedly the modifications of Ether are capable of locomotion: they give us all we know about locomotion. But the main body of Ether stays still. We are up against what was examined in the old Fizeau experiment, the result of which the genius of Fresnel enabled him to anticipate, but the best mode of expressing which has not been even yet definitely settled. The usual terms "bound ether" and "free ether" are not satisfactory, but they represent some meaning which cannot be evaded, and which I have not the slightest wish to evade, but only more definitely to interpret.

The one difficulty of yours with which I do not sympathize is an objection to the possibility of movement in a continuum. I feel no difficulty about that at all, and don't understand why other people do. To all appearance water is a continuum: its molecular structure is not given by ordinary observation, nor is it to be appealed to in order to explain the motion of a fish. Why on earth should not things move in a continuum?

15 April, 1925

Just a line in answer to a difficulty of yours in a letter of the 18th March about how soon Life appeared on the earth after its formation. The orthodox idea is that as long as a mass remains gaseous (as the sun does) it keeps hot, but that directly it solidifies (and a small body like the earth is bound to solidify almost at once at the surface), the interchange of heat with the interior is interrupted, and the surface soon becomes cool enough to admit the possibility of low vegetation. Kelvin estimated that a few thousand years would suffice for that, even though the interior remained exceedingly hot. Perhaps you know that

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the continents are still supposed to be floating on a molten or rather pasty magma of basalt;—so that its interior is still at a high temperature. And yet there is ice and snow in the Polar regions.

The Oxford University Press has just issued as a pamphlet the Halley Lecture by Dr. John Joly of Dublin on "The Surface History of the Earth." I haven't read it yet, but it is sure to be interesting. He is a man who deals with the best kind of Geology—or what seems to me the most interesting kind.

CHAPTER XVIII

21 July, 1925—5 October, 1926

Another Visit to Bradford—Ether Drift Question—List of Engagements—Visit to Italy with Lady Lodge—Work at a Physics Book—The Strike and its Lesson—An Ether-Body?—Taxation of Betting—Reiterated Belief in Survival—General Smuts.

WE managed to get Sir Oliver to come to Bradford again, this time for an evening meeting for the general public.

21 July, 1925

The ether drift question is *sub judice*: The drift supposed to be observed by Miller is only a residuum, reduced to that value by the neighbourhood of the earth. Even if verified it does not give the real motion of the earth through the ether. But I must say that the drag of part of the ether by the earth, which this experiment postulates, seems to me very unlikely. Miller had already communicated some details of his experiment to *Nature* a few weeks ago: *The Times* article was only a comment on it by Chalmers Mitchell.

Concerning the title for Bradford, I can do most easily "The Reality of the Unseen." I shall not make it spiritualistic in any objectionable sense. "The Destiny of Man" would be rather more trouble, and I must economize labour.

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The following list, supplied to me by his secretary, at my request, gives an indication of the rush of engagements in which Sir Oliver lived.

SIR OLIVER'S ENGAGEMENTS

1925	
July 22	Roy. Soc. Conversazione.
July 23	" " " in connexion with Royal Observatory (Burlington House).
July 27	Address North London Collegiate School, 5 p.m., "Atoms and Radiation."
July 28	Go to Switzerland (returning about the middle of August).
August 26	Beginning of British Association, South- ampton.
August 30	Southampton Brotherhood, 2.50.
" "	Preach Above Bar Congregational Church, 6.30.
Sept. 11	Possible Leonard sitting.
Sept. 23	Address to Radio Soc., 6.5, Inst. E.E., "The Mechanism of Radiation."
Sept. 27	Address Portsmouth Brotherhood, after- noon, Portsmouth Town Hall.
Oct. 6	Broadcasting with Dame Henrietta Barnett.
Oct. 8	Lecture to City Temple Literary Society, 7.0.
Oct. 26.	Lecture to Alderley Edge Guild, "Reality of the Unseen."
Oct. 27.	Lecture to Leeds University Students.
Oct. 28.	Lecture at Leeds Institute of Science, Art and Literature, 7.30., "Ether of Space."

1925

- Oct. 29 ? Lecture at Eastbrook Hall, Bradford.
 Oct. 30 Address in connexion with Unitarian Church, Newcastle-on-Tyne.
 Oct. 31 Lecture in Durham (afternoon) arranged by Dean Welldon.
 Dec. 2, 9 and 16 (? all dates or only one or two) Address Christ Church, Westminster, 1.15.

1926

- March 8 'Toc H Brothers' House at Kennington. Address.

Lectures of which dates are not yet definitely arranged.

Biennial Huxley Lecture at Charing Cross Hospital Medical School (autumn).

Huxley Lecture in Birmingham (autumn), "Difficulties about the Ether."

A possible course of Winter Lectures in connexion with the Halley Stewart Trust.

The first Norman Lockyer Lecture to be delivered some time this autumn.

Sir Oliver has never been any sort of faddist about food. As he says, he eats anything that comes along. However, when he was coming to speak in Bradford I asked him by post what he would like before and after his address, for some people rather vary their meals at such times, eating nothing for a little while before, and having a meal soon after.

He replied as below.

25 October, 1925

. . . As to meal before lecture, I prefer a sort of high tea—i.e. tea with say two boiled eggs; and then a snack afterwards of just sandwiches or anything else cold.

Sir Oliver lectured at the Eastbrook Hall on "The Reality of the Unseen," and I was chairman. There was an audience of over two thousand, and all went off very well. Unfortunately he had a bad cold, and I was anxious lest the effort should make him worse. When I greeted him in the anteroom—he had come on from Leeds in the Vice-Chancellor's car—I said, "It is very good of you to come, with that cold." Said he, gruffly but with a twinkle in his eye, "Yes, it is good of me." So I felt rather more comfortable, for if he was able to joke he was not feeling really ill. Still, he undoubtedly had a bad cold. During his lecture he stopped to complain of a draught from the back; it could not be altered, being part of the ventilating arrangements; so he calmly drew out of his pocket a black skull-cap, carefully adjusted it, and completed the lecture thus adorned. His voice lasted out well, and the lecture was given with his customary power and readiness—he had only a small piece of paper with a few headings on it—but he felt tired afterwards, and naturally was rather apprehensive of pneumonia or something of the sort, so he cancelled his engagement with Newcastle, and left for the south next morning. Happily he was all right again after a few days in bed.

Early in January, 1926, Sir Oliver and Lady Lodge went to Italy for some weeks, and I did not hear much from him. He was working hard at a Physics book. However, having his secretary, Miss Alvey, with him, taking down dictation of the book, he managed to send me a note now and then, more or less gossipy about the doings of the moment. His energy, for a man of seventy-five, was amazing. One evening, getting too warm in his evening clothes when dancing, he went upstairs and changed into tennis flannels, in order to continue dancing in comfort.

The next two letters from his secretary show that he was greatly enjoying the change. The essay of mine referred to was a wireless talk that had been broadcast from Leeds.

9 February, 1926

I like the essay on "Change and Permanence" the best of the three.

There was a great argument here the other day about living in the present, or looking forward. Most people confessed that realization seldom came up to anticipation.

Only it seems to me that nowadays the old people are enjoying the Present, even if the young ones aren't. Sir Oliver, for instance, enjoying every minute of writing his book, enjoying bridge at night, and dancing afterwards—most enthusiastic at the moment because Miss Bacon is teaching him new steps!

It's poured down for 2 days; a downpour that keeps us indoors. We shall rejoice when we see the sun again. The various artists have to be content to paint models, or sketch grey days from the windows of the house.

Work is still going lustily. And Lady Lodge seems better this week.

H. A.

19 February, 1926

. . . I don't think we shall be back until the middle of March. Sir Oliver enjoys being here and getting on with the book; he would never have done it with all the interruptions at home, going up to London and such like. I never saw him looking better. I've got several notebooks full, but don't suppose I shall type them out until I return. I take down and type the letters. The rest of the time Sir O. is dictating. It feels to me that it's going to be a book of several volumes—the accumulated knowledge of his lifetime, put into simple language.

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We all appeared in fancy dress one night this week. Sir Oliver was Henry VIII, looking very magnificent. And the pretty niece of Mrs. Cochrane was Anne Boleyn: she looked charming in her old-world dress.

I don't know whether I told you that I went to the wonderful old castle where Dante is supposed to have written his "Inferno." There is his room untouched, with queer old bed and writing desk, the narrow window giving a fine view of mountains. We are really very hard at work, and the frivolling is only occasional. •

H. A.

The general strike of 1926 lasted a few weeks, and the coal strike continued for many months. The public took it calmly, carrying on with work as far as was possible. Sir Oliver made a few comments on the situation.

19 May, 1926

I quite agree with your letter about the strike, and had indeed sent something of the same kind as a message to the forthcoming number of *The Radio Times*, in answer to a request for such messages.

The lesson has been of great service to the country, and, as far as I can see, will be found to have done unmitigated good in the long run, at a reasonable cost. Some revolutions have thrown up or made manifest the existence of a great man. The effect of this revolution has been to make manifest a great national spirit. This spirit was there all the time, but we did not know of its existence as we do now. The world also has been enlightened, and the example may be serviceable in other countries.

Perhaps it is one of the steps towards the beginning of a millennium.

25 May, 1926

I return Mrs. R. D.'s letter; I cannot make much of it. The controller of her automatic writing, whoever he may be, does not seem at all clear. In so far as they are any of them ever able to materialize, and in so far as they can manipulate or influence either the brain or the muscle of a sensitive, they have I suppose *some* relation to matter; but I should think it unlikely that their body has a muddled constitution, part ether and part matter. What we know as matter may be only one of the modifications possible to ether. Radiation is certainly another. I suppose it is possible also that electrons and protons may group themselves into something other than we know; but I would sooner imagine that there may be other structures in the ether unknown to us, which perhaps form the basis of a psychic body. But the whole speculation is so vague at present that it isn't worth pursuing, unless we can somehow get more information.

In matters of politics Sir Oliver usually had views of some sort, though he was always cautious in his public expressions of opinion, because he was keenly aware of the danger of uninstructed comment. I do not think he would have said anything in print about the taxation of betting, for he would have said he had made no study of the subject. But it is clear from the next letter that he had his opinions, though they might be somewhat exacerbated by the personal inconvenience caused him by the race crowds.

17 June, 1926

I was in London again last night, at the Royal Society Soirée, and returned to-day. In going up, I encountered the Ascot crowd, which blocked the road for over an hour. I do wish they would tax

21 JULY, 1925—5 OCTOBER, 1926

betting heavily, and get some revenue; it seems quite a legitimate source of income.

I was informed by Mrs. L. F. Deland (Margaret Deland, the well-known American writer) that a rumour was current over there, to the effect that Sir Oliver Lodge had recanted and no longer believed in survival or in the genuineness of psychical phenomena. The next letter gives the necessary contradiction.

12 July, 1926

The rumour that you have heard from America is absolutely false. My conviction about survival is absolute, and not likely to be shaken. If the rumour arises rationally, and is not an invention of the R.C.'s¹ or some other unscrupulous party, it *may* be the outcome of Mr. Soal's S.P.R. Paper,² which is interesting and instructive, but has led a few people to imagine that trance communications are all self-generated, or else the outcome of telepathy from the living. That is not the true outcome; but, as I say, the possibilities are instructive. Soal himself is fairly sure that the Frank was really his brother. As to the Ferguson and Gordon Davis communications, I have occasionally thought lately that I might write a comment on them, but doubt if I can find time.

J. G. P.³ was here yesterday and to-day. We discussed Soal's Paper a little. Neither he nor Fishers Hill⁴ generally is really shaken about the communications coming from the other side, i.e. about some of them so coming, though they are fully aware that

¹ Roman Catholics.

² Proc. S.P.R., Vol. 35, pp. 471-594.

³ Mr. J. G. Piddington.

⁴ Fishers Hill, the address of Mr. G. W. Balfour (now Lord Balfour), was a short way of referring to Mr. Balfour, Mrs. Sidgwick, and Mr. Piddington.

any amount of sophistication may be introduced, without unconscious deception, by over-exuberance on the part of the channel through which they come.

If you are in communication with Mrs. Deland, she might possibly like to see this letter; and if you have any opportunity, in American correspondence, to deny that I have receded from what may be called the spiritistic position in the slightest degree, please do so.

J. G. P. has read me the paper which he is going to read on Thursday next at the S.P.R., and I think it is very good. But whether the audience can take it in, *viva voce*, is doubtful. Even you may find a difficulty, and may think there is too much fancy in it. But if you knew the amount of solid and thorough work that he, and Fishers Hill generally, put into their papers, you would I think realize that their considered judgment is weighty, and such as you or any sensible person would similarly arrive at, if you had the material before you for months or years of study.

The book by General Smuts mentioned in the next letter, was "Holism and Evolution." I read it, and thought it a rather remarkable piece of work for a politician, though its terminology was somewhat inventive and repelling, and the ideas not easy to follow.

5 October, 1926

I enclose prospectus of a book by Smuts. I think we ought to see this book; so I am ordering a copy to go to you, in case you have time to read it before I do. Then it can come on to me with any comments. Smuts is, I believe, an educated Cambridge man; and it is singular that he has branched out into this semi-philosophic line; and some day I expect I shall be meeting him. I think I remember that Lord Grey thought well of him as a politician.

CHAPTER XIX

8 October, 1926—16 June, 1927

Visit to Leeds Luncheon Club—Thanks for Criticism—Misquotation—Orthodox Biology—Beethoven—Mystery of Life, Death, and Love contained in the Ether—Telepathic Experiments—Card Lore.

ON September 30, 1926, Sir Oliver addressed the Leeds Luncheon Club, and I was asked over as a guest. I sat next to Sir Oliver, and he asked me what he had better talk about. I suggested "The Reality of the Unseen," on which he had spoken at Eastbrook. He took the subject, as suggested, but probably diverged a good deal from the Eastbrook address. He had no notes, and spoke for about forty minutes, beginning with the real things in Physics which are unseen—molecules, atoms, electrons—going on to mental things which also are real but unseen—thoughts, emotions, etc.—and then mentioning psychical things, and religion. Considering that the audience was composed mostly of business men, it seemed rather risky, but they listened with rapt attention, and applauded lustily.

The first paragraph of the next letter refers to a Broadcast Talk.

8 October, 1926

I am glad to hear that my talk came out clearly. I have heard the same from various parts of the country. My wife speaks of it as "first-rate."

I wonder what your impression of my talk at the

Leeds Luncheon was. It was a curious occasion, and I don't know that what I said was at all appropriate: it is the kind of thing that I have said often enough before, but it seems new to each new audience. I don't really know if that kind of thing does any good: I generally decline all such "Club" invitations; but this time the Vice-Chancellor, who has been very friendly to me, urged me to accept.

12 October, 1926

Thank you for sending me the interesting and instructive criticism, with which on the whole I agree. I was doubtful about that mediumship statement at the time, I mean about the policy of it. I must get up some of the Vision impressions to which you call my attention, and utilize them.

There was a particularly atrocious misquotation from Tennyson in one of Sir Oliver's proofs, and I pointed this out, giving the correct version. Sir Oliver's half-whimsical, half-serious remark about annoying Tennyson, comes as rather a shock, perhaps, to most of us. That very fact shows how completely we have lost belief in survival; the idea that Tennyson can still be annoyed strikes us as novel and quaint.

8 January, 1927

I do admire the prompt way in which you deal with proofs, and I thank you for the emendations which you have suggested, especially in the matter of more accurate quotations—which were nearly all done merely from memory, and intended to be touched up. They might, however, have got overlooked.

Just a few remarks on your comment.

8 OCTOBER, 1926—16 JUNE, 1927

By "the shackled guards" I mean the clergy, shackled by their oaths of allegiance to orthodoxy.

"Inorganic ions" does not sound right. It may be a misprint in *Nature*.

Omar Khayyám. Your version is a new one to me. I will verify my quotation. I don't like your version.

"Reproductive cells do not always die." Lowly organisms such as amœbæ need not die. They can be killed of course, but otherwise they can subdivide and continue indefinitely. Weismann pointed out that this was true of our reproductive cells, and sought to explain heredity by the passing on of cells, which continue accreting a large number of other "somatic" cells, which are duly sloughed off from the germ cells. In other words some of the original protoplasm is handed on from generation to generation. This I believe to be orthodox biology, whether it be ultimately true or not. It would seem that something of the kind must be true, and gives a kind of continuity to physical life.

I quite agree that the "Crossing the Bar" quotation must be amended. It won't do to annoy Tennyson like that!

As another indication of Sir Oliver's many-sidedness I include the following letter on music, particularly Beethoven, on whom he had been lecturing.

7 April, 1927

Yes, I have listened to several of Walford Davies's talks, and thought them very good.

You are quite right about the Second Movement of the Fifth Symphony being the easiest and most obviously attractive. Also, I find that musicians put Mozart on a very high level, as you do. The other

day I heard at the Queen's Hall the First and the Ninth Symphonies. The First was written under the influence of Mozart: it was in the *Eroica* that he began to break out for himself; and the Ninth some musicians hold to be the most splendid of all. All he wrote after that was Quartets, which seem to require special study for their appreciation, and also need specially skilled reproduction, such as the Léner Quartet have been giving in London of late. In them each of the four instruments is equally important, they each get a turn at the leading part; that is to say, they are not mere accompanists—or perhaps rather they each take their turn at being accompanists. They each have an interesting tune to play, and the remarkable thing is that these four tunes harmonize and enrich each other. I do not pretend to know much about it; and I find myself only able to appreciate a piece of music when I have heard it a good many times. It is claimed that in these he embodied deep thoughts or feelings about the Universe; whereas his earlier piano sonatas were simpler and less deeply tinged with philosophy. He seems to have had a lonely life, with strong and unappeased feelings, which broke out in his music: somewhat as Schubert's did; though, being a bigger man than Schubert, he is less easy to understand. He has been likened to Shakespeare, and also to William Blake—another man I do not feel qualified to understand. My own attempts in the direction of feeling the majesty of the universe are those connected with the ether, which, however, is so enormous a subject that I cannot hope to get more than a superficial grip of it. It contains the mystery of life and death, and I expect of love too; but all these things are beyond me. They are realities, however,

the problems of which some day humanity will partly solve—though still I suppose there will always be an infinity beyond.

In some telepathic experiments, the "agent" looks at a card taken at random from a pack, and the "percipient" notes down the card that first comes into his head, as we say. The card is replaced, and the pack shuffled. This is repeated, say, for five cards, then a rest, and the process is gone through again, and so on. When a large mass of material has been thus obtained, mathematical analysis is applied, and a decision can be at least provisionally reached as to whether the results can be attributed to chance or whether there seems to be reason to believe that the one mind has influenced the other in some not-understood way. We had been discussing such experiments, and I had said that perhaps the mathematical reasoning was not as reliable as it looks, nor as easy, because though the chance of the agent's selecting the ace of spades is one in fifty-two, I thought the chance of the percipient's guessing that card was higher. In fact, I thought that some cards are more prominently in people's minds than other cards, and will tend to be guessed. This would complicate the mathematics of these telepathic experiments and would indeed perhaps spoil their evidentiality. Sir Oliver did not quite agree with me, and he wrote me two interesting letters on and around the subject.

30 May, 1927.

I wonder why you say that the numbers 1, 3 and 7 occur more frequently than other numbers? What is the matter with 2, 4, 6? And as to 5, it is rather a favourite number for the gambling game of *Petits Chevaux*.

I have had a letter from Jeans, Secretary of the Royal Society, on the subject of predilection of numbers. He finds that of the two-digit numbers

37, 73, and 99 are more frequently selected than others, especially 37. I am sending his letter to Fishers Hill and to Woolley: when it comes back I shall send it to you to see. I am surprised that he was interested in the recent telepathy test. It was the subject of conversation at the Athenæum last Saturday, but only between me and Campbell Swinton, who started the topic. He is quite incredulous about telepathy. But Jeans I am glad to find is not.

I wonder what we should find if we took a plebiscite of the Fellows of the Royal Society. I should anticipate a large majority against; but one never knows. There may be more open-mindedness in scientific circles than appears on the surface. There are diplomatic as well as other reservations to be taken into account.

16 June, 1927

I don't think the well-known arithmetical properties of 9, which it possesses merely because it is 10 — 1 (and would be possessed equally by 11 if 12 was our scale of notation, or by 5 if 6 was) have much to do with the choice of 99 as a number less than 100. Some minds, or people in some moods, prefer the middle of a series and say 37; while others, of more contrarious spirit, rush to an extreme and say 99. I find the same variation when offered a pack by a conjurer; sometimes I tend to choose a middle card, sometimes one very near the end.

Concerning the importance of an ace, that I regard as theological. The king was intended to be the highest of the pack; no doubt it originally was, and the ace lowest, as it often is for some purposes now. But then people felt that there was One higher than the king, and accordingly the ace took its high place.

In America some pessimists thought that the devil was over-powerful, and accordingly promoted "the black deuce," i.e. the 2 either of spades or clubs, so that in some games it overpowers the ace. The joker is the same idea, of course. In euchre the knaves take the leading place, as typifying I presume successful roguery. There are a few games where the queen of hearts is dominant, for obvious reasons.

Changes in suit values are also of interest. In the original bridge, hearts ranked highest, then came diamonds or riches, then clubs or war, then spades or labour. But as labour became more important, spades had a hovering period, when they might be highest or lowest at choice; and now they have definitely become the highest in value. So that the ace of spades, which was originally the lowest of all, and as such was decorated with the Government's stamp for duty, has now, on the principle of the last being first, become pre-eminent.

Reverting to the recent test, if the audience had known that the card would be chosen by cutting a pack at random, they would I think have given guesses much more in accordance with the Laws of Probability. I am sorry that I myself did not know the method of choice, when I was announcing at 2 L.O. It was quite the right method to choose, but I think the guessers should have been informed.

You will realize that most of the above card-lore is speculation evolved by myself, and has no known authority. I think, however, that unconscious psychology has played its part in the history of cards, as in the history of most other things.

My idea was that one, three, and seven—and perhaps nine—were favourite numbers. Arithmetic begins with unity, and one is the simplest number. Three is prominent

CHAPTER XX

7 November, 1927—5 March, 1928

Wireless in London Hotel—Dr. Barnes and the Eucharist—Mediumistic Diagnosis—Prayer Book Revision—Metapsychics and Parapsychics—Myers's Presidential Address, S.P.R.—Alpine Sun Treatment—Dreams—The Bible—Activity in Physics.

I HAD told Sir Oliver by letter about an hotel at which I had stayed in London, which had some of its rooms wired under the carpets—from a set in some other part of the hotel—so that one could put on headphones anywhere in these rooms and thus hear the London station. This seemed to surprise Sir Oliver, though of course he knew of its possibility. The phones were in no way connected to the set or any wall or other attachment; they had coils incorporated in them, as indicated by Sir Oliver. I am not quite sure that the coils were not picking the transmission up without any other wires, for the hotel was within a mile of the London transmitter, which had not then been transferred to Brookman's Park.

7 November, 1927

Your query about wireless at a London hotel puzzles me. Do you mean to say that if you had taken a pair of headphones in your pocket, gone into the hotel, and laid them to your ears you would have received the messages? If so, that is quite new to me. The distribution of a current from a single

set to all the rooms in the house is simple enough, but of course the phones have to be connected to wall plugs or general wiring. I am not prepared with an explanation unless the facts are more clearly stated. You say your fingers must not touch the phones; but I suppose the phones touched your head. If the facts are as you state, then it must be explicable by induction; but I am surprised, and would not have expected anything effective of the kind. I prefer to think that there was some connexion, unless you definitely state otherwise. All I can imagine is that the phones had a receiving coil incorporated in their structure, so as to enable them to receive inductively; but I have not previously heard of that being done. Extremely small receiving coils will do when the emitting station is not far away. Indeed I myself have received Paris (Eiffel Tower) with a coil no bigger than half a crown; but not with no coil at all. If the coils on the phone itself acted, they would have to be short-circuited, that is, their terminals would have to be connected. It could not be an ordinary open phone. I await further particulars about the instrument used. When there is plenty of power, almost anything will pick it up. For instance in my set the aerial can be connected to the set through the hand, without any metallic connexion; but that is another matter.

H. A. suggests that the telephone you used was practically a little portable set, and that it was not dependent on wires at all, and that it would have worked out in the street or anywhere.

9 November, 1927

Your hotel experience is interesting and surprising. An aerial under the carpet would not have done:

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transforming to acoustic frequency is essential I suppose it was induction from those wires, but the transformation or rectification must have gone on in the set first I should like to call at that hotel

About this time there was a good deal of public discussion about sermons by the Bishop of Birmingham (Dr Barnes) in which he had stated that the sacramental elements were no different after consecration, chemical tests could prove that Sir Oliver looked at it rather differently, for he knew that a sensitive can often tell something about a person by handling something that has been in close touch with him, although presumably that object is the same, chemically, as if he had not handled it In other words, there are things we do not understand yet, and Dr Barnes was hasty and dogmatic when he said that the elements are the same after consecration as before They may be, but it is not certain that they are.

Sir Oliver had told me of a sensitive—a Mrs Thompson—who, by holding a piece of cloth that had been in contact with a patient, was able to diagnose pressure on the brain by a piece of bone in a certain position An operation was performed, and the patient recovered This was in Liverpool "G P" of course is 'general practitioner' The incident is described in full in Sir Oliver's book, "Why I Believe in Personal Immortality," pp 94 8

Mr E J Dingwall had just published a book, "How to go to a Medium," in which he had given the impression that nearly all sensitives are frauds The last paragraph of the next letter refers to this

9 November, 1927

Barnes is suffering from his neglect and repudiation of psychic information Had he had it, he would have expressed himself more tenderly to the weaker brethren He was rebuked by Talbot and others mainly for the manner and occasion of his utter

ance ; and his reference to chemical tests was merely flippant. Few except ecclesiastics, lay and clerical, differ from him in actual substance, but the universe is rather less simple than he imagines it.

The cloth diagnosis was done by a Mrs. Thompson, a poor woman in a back street in Liverpool, whom my assistant Davies discovered, and found good. I wrote it out once for the S.P.R., but they turned it down, quite unnecessarily, and it has never been published. I shall publish this episode in one of my books before long, I expect. He took a lot of trouble about it. The surgical operator was the now famous surgeon, Sir Robert Jones. The injury was altogether missed by the G.P. who attended the case. I have not looked up the documents lately, and doubt if I have got anything from the G.P., which I expect would be necessary for the S.P.R. standard. I don't remember that I know who he is.

I quite agree about Dingwall's broadcast suggestion of fraud, which has the disadvantage of not being a true working hypothesis, though in physical mediumship we have to be firmly on our guard against it. People will not learn that plausible hypotheses may be quite misleading unless they are true. Bias either way is reprehensible. All this is coals to Newcastle!

23 December, 1927

Concerning the rejection of the Prayer Book, there is much to be said. It is of course a compromise, and accordingly no one was specially keen about it except the episcopal rulers of the Church, who hoped that it would strengthen their hands, and enable them to coerce recalcitrants. Birkenhead in his long and sarcastic letter in *The Times* of Tuesday, 20th December,

makes a good point by claiming that the rejection of the book will not only weaken their hands, but will defeat the object of the Protestants, since the clergy may now feel free to use the book; which has passed all the authoritative bodies except a snatch vote in the House of Commons after one evening's debate, and which has the vigorous approval of the Bishops. I should not be at all surprised to see the new Prayer Book put on sale, technically unauthorized though it be. A National Church is after all no light thing, and if a divorce of religion from the State ensues, as has happened in so many other countries, it will I think be regrettable. A reform in the direction of Modernism and breadth of view was quietly in progress; and, though reform is necessarily slow, there was an element of hope about it, which would be frustrated by collapse into a sect unstrengthened by national recognition.

30 December, 1927

I have rather liked the term "metapsychics" better than "parapsychics," partly because of the analogy of metaphysics, and partly because Myers used the term "metetherial," he did not use "paraetherial," though I presume the meaning is much the same. Why metapsychics suggests to you dancers and high kicks I cannot imagine! Richet introduced the term "metapsychics" to designate what he hoped was becoming a science, and to replace "psychical research"; which however did very well at first and was appropriate to the early stages of the inquiry into obscure human faculty generally, before we had anything like a body of established or fairly established facts, before even our experience with Mrs. Piper, which dates from 1889, and before I at any rate

was convinced of survival, I think also before Myers was.

By the way I have just read through (what I happened to have still in slip proof) Myers's Presidential Address to the S.P.R. at the end of last century. It is reprinted in the collection of Presidential S.P.R. Addresses, and I recommend you to read it again. It is remarkably eloquent, and contains a few phrases that I am proposing to quote in an article I am now writing for *The American Magazine*—rather a good article I think, at any rate a long one.

3 January, 1928

I am glad to hear that you have such an admiration for Myers. It is difficult to exaggerate my admiration for him and his special form of genius.

I noted for the first time in his Address, the other day, that he vaguely anticipated the structure of the atom. He often had an insight of that kind. I must call attention to it somewhere some day—remembering always that these vague anticipations are more of personal than of scientific value: the discovery belongs to him who works it out. But genius sometimes jumps ahead. Occasionally I feel ambitious enough to hope that that will turn out some day to apply to my lucubrations on the Ether—but again the credit will belong to him who works it out.

Thank you for the correction to the Emerson quotation. I had not realized (what you seem to suggest) that the "I" means God. Myers seems to take it as meaning one's own soul. I do not know where it occurs in Emerson, or what his meaning precisely is.¹

¹ The reference is to Emerson's poem "Brahma."

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About this time Sir Oliver was trying Alpine Sun treatment, and I was thinking of getting a lamp, so we compared notes. I had been having light baths at the house of a doctor who had an installation.

18 *January*, 1928

Thanks for further particulars of the light treatment. The electrodes I use are carbon with a little tungsten in them. Tungsten electrodes are 12s. a pair, and are said to be about twice as strong as carbon, but on the whole I incline to favour the milder treatment, and not to overdo the time either. I don't use more than four minutes in all, sometimes less, and we experience no reddening; although in actual summer sunlight I do; a red patch on my chest, for instance, with some irritation for ten minutes afterwards, is the result of exposure to bright sunlight. This I think shows that the blood is in a not quite healthy condition, and indicates that perseverance would be beneficial. I fancy that the action is primarily on the blood, and that thereby it is carried to all parts of the body. This is a lay or quack opinion.

The following occurs after a reference to a book by J. W. Dunne, entitled "An Experiment with Time"—a book about dreams.

1 *February*, 1928

. . . Psycho-analysis and the like have caused people to attend to dreams more than they did. To me they are fugitive unsatisfactory things, often verging on a sort of nightmare; but some people seem to be acquiring the faculty of controlling their dreams. Van Eeden of Holland was one, and when he sat with Mrs. Thompson's control "Nellie," he got con-

firmatory evidence about some of them, and Nellie used to visit him in his sleep. I suppose the standard book of a developed dream drama is "Peter Ibbetson," which, though imaginative, is to some extent founded on fact—so Du Maurier rather tacitly admitted to Myers, when Myers long ago questioned him about it.

Raymond says his mother sometimes comes over to him at night, and hopes that some day she will remember, but at present she does not. He also constantly insists that she was with him when he was wounded, but of that she knows nothing. It seems more likely that in a state of semi-consciousness he went to her. But anyhow she had no intimation, and the blow was unexpected when it arrived. We were up at Gullane in Scotland, and indeed he says of me that I was "knocking little balls about."

The next letter is about a pamphlet called, I think, "A Warning." It referred to coming calamities, and incidentally was rather anti-ecclesiastical.

5 March, 1928

I sent you the Conan Doyle pamphlet for keeps. Of course he says some true things, but I rather regret his saying them. It might be proper enough for a man who has studied Literature and Theology to say some of them; but everyone knows he has not studied them, and if he had he would have expressed himself differently. Our English Bible is a literary gem, made at a time when our language was in a rather exalted state—which at present I fear it is not, the influence of journalism and America is a deteriorating influence. An iconoclast is sometimes necessary, and sometimes I presume does good work; but I am

usually against destructive criticism; it arouses opposition, and has somewhat the same effect as persecution. Construction is much more effective, and the old errors drop away in good time in a peaceful manner, just as some revolutions are accomplished without bloodshed. That the O.T. ideas are crude is quite appropriate to the early times. What is needed is instruction in their interpretation, and a human and cultivated understanding. Thomas Paine, Bishop Colenso, "Essays and Reviews," Matthew Arnold, have all contributed towards saying what Conan Doyle says. There is still a great amount of ignorance and illiteracy, which nevertheless is pious and easily hurt. The attacks of a paper like *The Free-thinker* I don't mind at all; but a violent attack from the 'camp of Spiritualism I do regret. It won't do any good, and it will intensify clerical opposition, and lend some colour to their claims of its anti-Christian and irreligious character. I do not say it will justify their claims, but it will give them an additional weapon, and strengthen their dislike. The bodies it will hurt most are not the Anglo-Catholics, but the Nonconformists and the Evangelicals, who nevertheless on the whole are trying not to be bibliolaters, as their ancestors were. But the work of reinterpretation, like most other work, should proceed slowly, by positive contribution to knowledge.

What he said about the Holy Spirit was mistaken and bad even from his point of view. He slipped there . . .

The number of *Nature* that I sent you was a very fine one. The world of Physics is extraordinarily active just now; and the younger men in all countries are very brilliant. The mathematics of the present day is rather appalling even to me: most of it is new,

I mean the methods are new, not fifty years old. The mathematics of fifty years ago I spent years in acquiring, ten years at least—one cannot do much in less. School algebra is only the alphabet. But I and many others of the older generation are now being left far behind. My twenty years in Birmingham were a serious gap, for one thing, and I lost ground even in Physics, though it is true that I have a sort of instinct in that direction, which enables me to appreciate what is being done, in a general way. Even J. J. Thomson is being left behind, and I have heard the still greater mathematician (considered as a Pure Mathematician) Joseph Larmor, spoken of as if he were now on the shelf. Youth is pressing forward with undaunted energy into regions which would rather have horrified old Kelvin. Even Newton is becoming antiquated; and they have but little respect for their scientific ancestors. We are living in a revolutionary period, and some years must elapse before we settle down with some return to what may be called common sense.

I was talking to the President of the Royal Society the other night, and he feels about it much the same as I do, though he is surrounded by a brilliant group of young men at Cambridge, who are in touch with the latest developments on the Continent, and whom he greatly admires. He has the advantage of one of them as a son-in-law, namely, R. H. Fowler. And he was telling me of one of the youngest of them who he predicts will eclipse them all, a Cornishman named Dirac, of whose work at present I know next to nothing. Heisenberg was the last of the young men to arouse my admiration, and him I met for the first time at Leeds, a modest but evidently a very brilliant youth. Max Planck, Bohr, Sommerfeld, and now Schrodinger,

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are the leaders of the revolutionary school—modernists with a vengeance. And progress, if it is progress, is so rapid that to exaggerate a parodied quotation from “Macbeth”:

A theory a year old doth hiss the speaker,
Each fortnight seems a new one.

CHAPTER XXI

8 May, 1928—6 December, 1929

Books by Siegfried and Gibbs—Lord Grey—H N Russell—
Shakespeare's Sonnets—S P R and Roman Catholic Influence
—Conan Doyle's "Land of the Mist"—Death of Lady Lodge
—Spirit Photography—Dr and Mrs Crandon.

A YOUNG man asked me at my club what would happen to an aeronaut in a balloon if the earth were annihilated while he was aloft. I answered the question as well as I could, lent him Sir Oliver's book "Pioneers of Science," and asked Sir Oliver, the next time I wrote, whether I had answered correctly.

8 May, 1928

"Pioneers of Science" is just the right book for your workman friend. Your answer about the balloon seems quite right. Both the balloon and the man would go on revolving round the sun, as they do now. The only difference would be that the moon would have no earth to revolve round, but that would make very little difference to its solar orbit. It does not make any loops now, as you perhaps know, its path is only slightly sinuous, after a cycloidal fashion. I presume, however, that the balloon would begin to revolve round the moon, not necessarily in anything like a circular orbit. It would depend on its initial velocity at the time, taking into account its

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diurnal speed round the earth, whether it would fall in or miss it. The chances are that it would describe an elliptic orbit without anything like grazing.

The book on America mentioned in the next letter is Siegfried's "America Comes of Age," which I had offered to lend him.

5 June, 1928

I shan't have time to read that book on America, though I doubt not it is instructive. I don't feel that we are competent to understand American politics, or indeed the politics of any other nation, sometimes including our own! . . .

I have just been reading a book by Sir Philip Gibbs called "The Day After To-morrow." It is a striking presentation and accusation of present tendencies, due to his having associated with such men as young Haldane, Julian Huxley, and other enterprising and clever biologists, and having attended lectures by Rutherford and others at the Royal Institution. He has something of Kipling's facility for picking up ideas and dramatizing them when he chooses. This last book however is not a tale, but a series of chapters on present and future conditions, if the modern tendency continues and enlarges. It may be regarded as depressing, but I think it ought to be a stimulating book. It is certainly a sign of the times, and incidentally controverts Wells's Utopia, and points out the evil of materialistic theories. He seems to me earnest though journalistic. And I fancy he must be a man worth getting into touch with; at any rate I have sent him a copy of my latest book, which will probably draw a letter from him . . .

Lord Grey was here to tea yesterday. I liked his

(broadcast) Talk,¹ and find that the country people here liked it too.

About this time I happened to write, in consequence of not having heard from him for some days, that I supposed he was immersed in physics again.

13 August, 1928

I wish I were, or could be, immersed in physics. But the fact is I am very anxious about Lady Lodge's health. I had to return from an attempted holiday after one week, and don't feel that I can go away again. Her life sometimes seems to hang by a thread, at other times she picks up again; but she is getting weaker.

H. N. Russell is a very leading astronomer in America. I have met him but only recently. He is a bright man. I should very much like to read the book you speak of.²

3 September, 1928

I am glad you lent me that book of H. N. Russell's. I found him a pleasant and brilliant man, and I knew of his astronomical reputation; but I should not have realized that he was so thoughtful a person apart from this book. It seems to me a good piece of work. His contentions are not the same as mine, but they are useful as far as they go, and he seems to get to the right destination without our evidence.

30 October, 1928

Yes, I went on to Colchester next day and stayed a night with my old friend Canon Rendall, ex-Principal

¹ I think the broadcast Talk by Viscount Grey was on love of Nature—bird life, etc.

² "Fate and Freedom," by H. N. Russell.

of Liverpool and also of Charterhouse. We had a good talk. He is working at Shakespeare's sonnets, and finds evidence that they were really written by the Earl of Oxford. He has made a serious study both of the sonnets and of the history and biography of that time. He hasn't made a serious study of the plays, but it is generally considered that the writer of the sonnets must have written the plays. He feels sure that the actor of Stratford-on-Avon cannot have written them. He also thinks the Baconian theory preposterous and absurd.

I suppose in about two years his book will come out, and then we shall hear more of it. I had heard the suggestion made before, but it has been rather ignored. Now I expect it will get taken up and criticized. If established (as knowing Rendall I am inclined to think it will be) the chief blow will be to Stratford-on-Avon. Realities will be unaltered.¹

The Oyster Feast was more ordinary than I had expected, except that there was hardly any other food than oysters. The room was very big, and the speeches some of them inaudible. Instead of returning home I went on to Birmingham, spoke there on Sunday and got back in time to speak at Salisbury along with Lord Cecil. Now I have got a cold.

Some one had asked me whether I thought the S.P.R. Council was under Roman Catholic influence; it happened that a priest of that Church—Father Thurston—had recently reviewed a book in the S.P.R. Journal.

5 January, 1929

As far as I know, Father Thurston has no influence in the S.P.R. People of all shades of opinion might

¹ "Shakespeare's Sonnets and Edward de Vere," by G. H. Rendall, B.D., Litt.D., LL.D., 1930.

be asked to write reviews. The worst of a Jesuit is you never know what concealed motives he may have. As far as ordinary Catholics are concerned, they are, as you know, forbidden in the gross to have anything to do with it (that is, with psychical research), but special exceptions or dispensations are continually made. For instance, — and — are Catholics, but they told me some time ago that they had arranged with their priest to be allowed a free hand. I expect that the Roman ecclesiastics are encouraged to study it to some extent, just as they study Darwinism, so as to have weapons for attack or defence. No doubt they are all under discipline, and probably the conclusions at which they are allowed to arrive are laid down by authority.

The dominating influence on the Council is Fishers Hill, which is an inheritance from Henry Sidgwick. I feel sure that this has no connexion with ecclesiasticism of any kind.

I am reading aloud to my wife just now Conan Doyle's "The Land of the Mist." I don't know whether you have read that. He uses the narrative form to illustrate what ordinary group seances are like (which he does in a fair manner) and also to bring home to people the unfairness of the present law, and the absurdities of scientific opposition.

After this date my correspondence with Sir Oliver became less frequent, in consequence of various things; Lady Lodge's increasing ill-health, the failure of my own eyesight, which eventually prevented reading or writing, and so on. I met him at a meeting in London on 24 October, 1928, and he was in good form, though troubled about Lady Lodge. For a long time her life had hung by a thread, as the phrase goes, and on many occasions they thought she was going. For many months there were

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two nurses in the house, and on 20 February, 1929, she died. The severance of a happy companionship of over fifty years must be a blow the pain of which cannot be estimated by others; but Sir Oliver bore it with the fortitude which was to be expected in one of his character. He had an In Memoriam leaflet printed, of which he sent me a copy; a beautiful tribute to her, but intended mainly for the eyes of the family, so I do not include it.

I had several sittings with Hope of Crewe, the photographer on whose negatives extra forms sometimes appeared, sometimes resembling a deceased relative of the sitter. I never got anything really clinching, for though forms did appear on the negatives, they were not recognizable. At the first sitting I saw something which made me suspicious of fraud, but on later occasions I was more inclined to think that the phenomena were at least genuinely supernormal, whatever their true explanation might be. Sir Oliver was open-minded on the subject; he said there was no theoretical objection to the idea of invisible things being photographable, for this is already true of some parts of the spectrum. He thought that so-called spirit photography was entirely a matter of evidence, and that we might have to believe in it, if the evidence became strong enough.

I am much interested in your having encountered Hope again, and formed a more favourable opinion about him. The probability to my mind is strongly in favour of simplicity and honesty, now that he has been going on so long. Surely any motive power associated with fraud would have evaporated long ago. The atmosphere of suspicion naturally attaching to all physical demonstrations greatly hampers their rational investigation.

There had been much public interest in the phenomena occurring in the presence of the wife of Dr. Crandon, a

surgeon of Boston, Massachusetts, and in December, 1929, Dr and Mrs Crandon paid a visit to England, giving a few sittings to friends. Mrs Crandon is not a professional medium, and receives no payment. Dr and Mrs. Crandon stayed one night with Sir Oliver at Normanton House

6 December, 1929

The Crandons are very pressed for time, and have lots of engagements. They are going to Paris on Wednesday. They were good enough to come down here for one evening, and we had a good sitting last night. They left by early train this morning. If you are able to go up to make their acquaintance, it would be a good thing. She is quite a charming woman, and it is really absurd to have any doubts of their genuineness. We got very good phenomena last night, under test conditions; and they are perfectly fair and above board. My daughter was here, and took control of Mrs Crandon, and also took Dr Crandon out of the room while one of the phenomena was repeated. H A was present, taking notes, and observing too, and my chauffeur Walker was there too, to act as assistant in arranging the room, etc, and putting things right afterwards. It was his first experience, and was very convincing. I have got two good finger prints, one of Walter, the other said to be Raymond's, but this has not yet been verified. You may however be quite certain that they are all right.

CHAPTER XXII

10 February, 1930—18 February, 1932

"Fading" and Position of Moon—Sir James Jeans—Darwin, Huxley, and Weismann—Eugenics—Science and Philosophy—Emergent Evolution—Bradford Re-visited—A Clock Problem—General Smuts and the British Association—Survival—Summary of Religious Belief.

A WIRELESS dealer told me that he thought he had noticed some connexion between the fading of the Midland Regional station and the position of the moon. I asked Sir Oliver about this.

10 February, 1930

The present idea of the B.B.C. engineers is that fading is due to interference between a direct beam and another reflected from the Heaviside layer, which may in some places arrive in opposite phase, so as to partly obliterate each other. It is a plausible explanation, which occurred to anybody long ago; but I thought it too glib and easy to be likely. I understand, however, that evidence has accumulated in its favour; so, on the assumption that it is true, changes in the Heaviside layer would certainly affect it; for instance, variations in height would make all the difference. But the layer itself is produced by radiations from the sun—the moon could have nothing to do with it, or next to nothing; and I cannot think it likely that the position of the moon has any effect.

It is of course a question of fact, one way or the other ; but the evidence would have to be substantial before the fact was accepted.

If your correspondent accumulated trustworthy evidence for a year or two, each month, he might be doing good service ; just as the systematic observations of sunspots by a German enthusiast, Schwabe, over practically a lifetime, resulted in the discovery of the eleven-year period, when the results were tabulated, and analysed by a curve showing the variations, with maxima and minima. Since then, as you know, other curves have been plotted, showing magnetic disturbances, and even agricultural fluctuations, such as the price of wheat. These too have been found to have a somewhat similar curve.

At present, our attitude to a statement about the moon would have to be one of scepticism, in default of a body of evidence in its favour.

Sir James Jeans had been giving a broadcast Talk, and had mentioned psychical research rather disapprovingly. I remarked to Sir Oliver that I disagreed, but that Jeans had a right to his own opinion. Sir Oliver replied as below.

6 March, 1930

As to Jeans, I don't think he can be said to have studied psychical research at all ; but it is always safe for a scientific man to pour scorn upon it. In astronomy he is sound enough, though he has views there which are in opposition to Eddington's ; but opposition and controversy about those things is a controversy between experts, and therefore useful in the present state of our comparative ignorance.

When he deals with sociological problems, and condemns the philanthropic efforts which preserve the

weak and the ailing and the children who would otherwise die off in infancy, I am unable to agree. But these are difficult problems of which I have no solution myself. I presume that some steps ought to be taken against breeding from the unfit; but it is a serious matter for mankind to play the part of Providence. Sterilization of the feeble-minded may be a right policy, but it seems terribly open to abuse; and it will be difficult to draw lines, and decide how far it is to go.

The statement with which I disagree in your letter is that Jeans is entitled to his opinion on psychical subjects. I do not think he is entitled to any opinion, and that he is merely echoing the prevailing prejudice.

His "Point of View" seemed to me on the whole pessimistic, in spite of flashes of rightness. There is a certain school which advocates the continuance of the struggle for existence and destruction of the unfit; as if the Darwinian method of evolution was not only an historical fact, but a guide to the future also, even now that consciousness has come to fruition. Gilson, the Head Master of King Edward School, Birmingham, used to maintain that. It leads to depreciation of philanthropy, and seems to cut at the root of Christian Ethics. Huxley in his Romanes Lecture saw the difficulty, and took a more rational and kindly view. Extreme Weismannism among the biologists, if only it were true (which I doubt) would also be a help in that direction; for if acquired characters are not inherited, the misbehaviour of parents would not necessarily lead to the deterioration of offspring, since their ancestral stock would be transmitted irrespective of what the temporary transmitters of that stock were doing. But extreme Weismannism is being vigorously assailed by the biologists themselves, i.e. by

some of them, and the evidence is against it. Hence Eugenics is a difficult and precarious subject as a guide to practical politics. The breeding of human beings as you breed animals is first of all impracticable, and next repulsive. What the solution is I do not know. I don't think the opinion of an astronomer will be any help. In physics I must say that Jeans is exceptionally learned and well informed; but, like most of the rest of us, including Lord Kelvin, he is apt to pronounce on subjects in which he has no authority. People should have the sense to understand that; and anyhow there will be a large amount of passive resistance against the practical application of any biological theory . . .

I, like the rest, am only one of the units in such matters. Even that portentous phenomenon Mussolini, and that well-meaning person Gandhi, and that misguided patriot Lenin, have shown some faculty for making mistakes. The lack of infallibility is the one certain attribute of man.

I had been lecturing to a scientific society on the logical and philosophical aspects of psychical research, and had found the members rather at sea in matters of logic and philosophy; rather naturally, for the Society was concerned mainly with physical science, and not many members pushed their thought deeper than the phenomenal.

23 October, 1930

I need hardly say that I agree with your philosophic interpretation of the views of the physicist. They do tend to be more idealistic than those of the physiologists, because they are constantly dealing with immaterial or supersensuous things, and the physiologists limit themselves to the bodily mechanism, at least the majority of them do. It is just the material

mechanism so dominant in the nineteenth century which has tended to break down in the twentieth.

Hecklers at a meeting are a nuisance, but the worst kind, I find, is the fundamentalist, the man who believes too much or too indiscriminately; one has a sort of sympathy with them as weaker brethren.

You seem to have got on at your meeting very well, though I am not surprised that they were puzzled by any philosophical outlook; they are more accustomed to deal with the concrete than with abstractions.

The next letter refers to a talk by wireless, the speaker being Sir James Jeans, on Astronomy. Other remarks in the letter, about Emergent Evolution and so on, are in connexion with another series of wireless Talks on Science and Religion; I had mentioned one of them in particular, by Professor Alexander.

12 December, 1930

In Jeans's last talk (which, by the way, was printed in Wednesday's *Listener*) he was certainly referring only to the galactic system. He is leaving the spiral nebulae for next time; and will then talk of the cosmos as a whole.

He replied to my letter in *Nature*, and I will enclose a press cutting, which however I should like back. There doesn't seem anything particular to answer in it. His view of the Ether is certainly what you suggest, that it is a convenient fiction, like the Equator. But naturally he is not infallible; I do not agree with him. I did not reply to this part of his book, though I might have said that I had no wish to "speak disrespectfully of the Equator" . . .

"Emergent Evolution" is Lloyd Morgan's idea, and Alexander was adopting it. It is true that certain things emerge in the course of evolution; for in-

stance, our atmosphere is so to speak a consequence of the size of the earth. If the earth were no bigger than the moon, the atmosphere would soon dissipate. Again, the high temperature of the sun seems to be a consequence of its vast size : and yet it (importantly) makes life and activity possible on this planet. Emergence and Evolution are, as you say, much the same thing. Only the term Emergence calls attention to the fact that in a sense new things come into being : though, as Dean Inge urges, anything that emerges or evolves must have been implicitly wrapped up in the previous condition. But it emerges into actuality. According to the materialists, Shakespeare and Newton were implicit in the original fire-cloud, and have only emerged. The idealist, however, knows that the evolution of the nebula only makes it possible for certain other things to associate themselves with matter, things which are not material, and which have no connexion with and were not implicit in the original nebula. The potentiality must have been in the universe, but in the universe as a whole, certainly not in the material universe.

On 20 January, 1931, Sir Oliver lectured in Bradford on "The Modern Outlook of Science." His programme for that day is notable for a man of nearly eighty. He motored in the morning from his Wiltshire home to Andover, thence by train to London, lunching at the Athenæum Club, and then leaving King's Cross by the 1.30 train. We met him at the station in Bradford at 5.30 p.m., had a meal—after he had been besieged by Press photographers and would-be interviewers—and after a talk and smoke we went on to the hall, where over two thousand people were awaiting him. He spoke for fifty minutes, giving a closely-reasoned exposition of the recent history of science, particularly physics, and indicating the direction of future advance ; and

the discourse was given without a single note, and without any halting or repetition. He would sometimes close his eyes for a few seconds, while he thought out his next sentence, but there was no break or hesitancy when he was speaking, and his fine voice was almost as good as ever. After the lecture he motored to Leeds, where he had to lecture on the following day, Wednesday. On the Thursday he lectured in Harrogate, on Friday he spoke again in Leeds, at the Rotary Club luncheon, and left for London in the afternoon, reaching home on Saturday. I was anxious about him, for such a programme would have been too much for many a younger man; but he wrote saying that he was rather tired on Sunday, but all right now (Monday).

In his autobiography, the manuscript of which I was reading and commenting on, Sir Oliver had mentioned a cousin who, at nine years of age, was able to give a correct answer to the question, "At what time after twelve o'clock are the hands together again?" He did this calculation mentally and in a few minutes. Sir Oliver remarks that not many boys of nine could have done it; and it is hardly surprising that this cousin became a professor of mathematics. On reading this little story I put the problem to myself, and was rather humiliated to find that the problem which had been worked out in a few minutes by a boy of nine, was difficult enough to give me a good deal of trouble. Of course I know that I am very weak at this kind of thing, and I did not expect to see the way to an answer straight away. When I did see it, I was uncertain as to whether I had gone the right way about it, so asked Sir Oliver. My way had been to start with the fact that inasmuch as the large hand goes round the clock face twelve times while the little hand goes round once, the large hand must pass the small one eleven times in the twelve hours. These passings will take place at regular intervals of one-eleventh of twelve hours, so the first passing will be at one hour, five minutes, and five-elevenths of a minute, after twelve o'clock. Sir Oliver made his comments in the next letter.

2 March, 1931

Your method of dealing with the hands of the clock is quite good, and I should think the best way. I don't know how Percy Heawood managed it. Very likely the same sort of way. One hand moves twelve times as fast as the other, but relatively to the hour hand the minute hand goes eleven times as fast. It is a case of relative motion, and that is how the eleven comes in. I don't think I can improve on your method, though it is quite possible to generalize it and to say where they will be together after the lapse of any time you care to specify, twelve-elevenths, twenty-four elevenths, thirty-six elevenths of an hour, and so on.

The President of the British Association meeting of September, 1931, was General Smuts, and Sir Oliver spent most of the week in London, attending many of the meetings. He also happened to be speaking in Liverpool Cathedral, along with General Smuts, just before the British Association week. He refers to these matters in the next short note.

6 October, 1931

Yes, I saw a good deal of Smuts at Liverpool, London, and Cambridge. He did his work extremely well. He spoke of several subjects; always with interest and something new to say, and he made an admirable President, very alert, intelligent and competent. He was quite the right man to choose for the occasion, and he justified the appointment. Moreover, his ideas are not hopelessly unlike my own, which made it a pleasure to listen to him when he became philosophical. As a product of South Africa he is distinctly remarkable.

The whole of the meetings have been successful.

The side-shows have been attractive, and Londoners have more or less risen to the occasion. So apparently there is nothing to regret. I am glad it is all well over, and that I have come back to steady work again.

If you come across Ewing's Presidential Address to Section G on Power, it is well worth reading. I haven't read the others yet.

It was remarked by some reviewer of Sir Oliver's book "Past Years," published in November, 1931, that its title was probably suggested by a line of Newman's hymn, "Lead, Kindly Light."³ This seemed to me unlikely, but I inquired. All I knew was that Sir Oliver had mentioned to me a few possible titles, including "Past Years," and had asked me which I liked best, or whether anything else occurred to me. "Past Years" seemed to me very good, being brief and descriptive, and it recalled some lines in Wordsworth's "Ode on Intimations of Immortality" which are more or less appropriate. Sir Oliver said in reply to my query: "I only know that it had nothing to do with Newman's hymn, in which it only enters as a kind of apology . . . But as soon as it was suggested to people they recalled Wordsworth's Ode, and that suggestion I adopted as a sort of literary allusion that was satisfactory." Sir Oliver goes on to say that he thought his secretary suggested the title in the first place, but that she denies this, saying that it occurred to him, *à propos* of nothing in particular. "Anyhow it is unimportant, but the title seems appropriate."

Many years ago a rumour was current that Sir William Crookes had renounced the opinions to which he had been led by his earlier psychical investigations. He published a denial of this rumour, saying that he recanted nothing of what he had written. Similar statements have been made about Sir Oliver Lodge; perhaps by unscrupulous opponents, or perhaps in consequence of some mistake and without intent to deceive. The next letter gives the

necessary contradiction. This letter is a suitable termination, for it reveals the deeply serious and religious note which is so characteristic of Sir Oliver's thinking. It will have been seen from the letters that he uses "orthodoxy" in a rather wide sense; he does not accept the verbal infallibility of the Bible or the resurrection of the material body, or Heaven and Hell in the sense that the soul enters into a fixed state at death. But perhaps the holding of these beliefs is no part of the orthodoxy of to-day. Indeed, the term "orthodoxy" is becoming almost obsolete, at least in the Protestant Churches. It is recognized that no Church has a monopoly of the truth. There are many voices in the world, and none of them is without significance. God is no respecter of institutions; Whitman was inspired, as well as St. Francis.

18 February, 1932

You seem to have heard a rumour that I have changed my mind about Survival, and am more doubtful about the evidence than I was. If so, you can definitely contradict it. I am as absolutely convinced by the evidence as ever I was. Lapse of time has no effect on my belief; in fact it has given opportunity for more and more evidence to be received. And the evidence is cumulative. To all I say in my published books I adhere; and my faith in the reality of a Spiritual World is stronger than ever.

You ask also about my attitude to Christianity. Well, that is a large subject, on which I have expressed myself from time to time, on the whole in an orthodox direction. The spiritual world interacts with ours, and one of its modes of interaction was what we call the Incarnation, the Incarnation of a Spirit so lofty as to be to us Divine, in the person of Jesus of Nazareth.

With physiological questions I do not trouble myself. Somehow or other, at a certain stage of the

world's history, it became possible for the Eternal Christ to take upon himself a human nature, and to dwell among us as the Son of Man, for the purpose of helping those who thus became his brethren, and showing them some attributes of the Godhead which they otherwise would have missed. In his teachings he emphasized the love and goodwill of the Father, and always sought to obey that will, even when it led to torture and death, from which his human body shrank. In his agony he was still able to ejaculate, "Not my will, but Thine be done." And as a result of this great self-sacrifice, he takes a position far more exalted than any of the other sons of man: so that to most people he is a sufficient representative or symbol of what they mean by God. He represents indeed the revelation of God which has been vouchsafed to this planet earth, and his Spirit is still active and helpful to all who need and ask for help, and is the ultimate source of all inspiration, through whatever different channels the inspiration may filter down to us.

Perhaps that is sufficient to show that my belief is not out of harmony with the Christian faith in its essence, as held by most of the Churches. I do not concern myself with the differences of the sects, which seem to me comparatively unimportant, and am content to worship the Father as revealed through our Lord Jesus Christ, and to hope that the destinies of our nation, and ultimately of the whole world, may be guided more and more by his Holy Spirit.

I do not usually express myself like this in a letter; but you asked the question, and therefore I answer it.

Here I conclude my selection from the letters. The correspondence continues, but letters are now mostly in the nature of short comments on contemporary happenings

in psychical research or references to books which one or the other has been reading, and this kind of letter has already been sufficiently exemplified. Sir Oliver is well in health, and his mind is as alert as ever. He works longer hours than most men, reading, writing, and dictating. His correspondence is large, and he is always engaged on the preparation of some book or article for the Press. When he is away from home he is usually either broadcasting a talk from the London studio of the B B C, or giving an address before a learned society or some Brotherhood gathering on a Sunday afternoon. He keeps in touch with the progress of science, and has a specially keen interest in physics—the science in which he achieved so much in earlier days. He has his own views on some of the controversial aspects of the subject, but his aim is to get at the truth, not to score points in debate, and he often expresses enthusiastic admiration for the work of the younger men, particularly on the mathematical side. Accepting their results, he carries his thought farther on the more physical side, he regards Space, or the Ether of Space, as being full of life and mind. His book "Beyond Physics" is a preliminary statement of his thoughts on this theme. Sir Oliver is probably better equipped than any other living man for the working out of a philosophy which shall accept all the results of science, and at the same time shall include a spiritual world, for he has made a life long study of psychical as well as of physical science.

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THIS volume is for the most part a collection of letters with explanatory notes, but the notes include a good deal of personal matter as well as explanation of the letters. It is a partial biography; it presents Sir Oliver Lodge as he appears to me. And, after the letters and comments, I may perhaps be expected to sum up my impressions. A biographer feels some diffidence about this, if the book is to appear during the lifetime of his subject; he may feel hampered in the free expression of agreement or disagreement, approval or disapproval. But in the present case I think there is no difficulty. As already said, Sir Oliver likes criticism, for he can learn from it; even from foolish criticism he learns something about the state of public opinion so far as it is represented by that critic. So there is no difficulty on that side. As to eulogy, that may be an impertinence, and it may be distasteful; but if moderate and honest, it may pass. I remember a lecture of Sir Oliver's at the end of which a distinguished local cleric was called on to propose a vote of thanks. He was generously endowed with the characteristic eloquence of his Cymric race, and he tended to lay the compliments on thick; what he said was true enough, but it did approach what the Englishman calls fulsomeness, perhaps in its manner rather than its matter. In responding, Sir Oliver said, with his usual quiet naturalness: "If I were troubled with self-consciousness, I should feel uncomfortable and embarrassed, after all those nice things that have been said. But I thank God I am not troubled with that self-consciousness." And he

seemed to put it all out of his mind, proceeding to say a few more words about the Ether of Space, and then "Good night!" This was typical. More than any man I have known, Sir Oliver can ignore both praise and blame, so far as is humanly achievable, he seems indifferent to both, so long as he feels that he has done right. This is not to say that he has an indifferent nature, he is extremely sensitive, and can be hurt by friends, if hardly at all by enemies or critics, but, once conscious of having done the right thing, he goes his way without bothering at all as to what people say about it. Accordingly I can say my say without fear of giving pain or offence.

I suppose it is my opinion of Sir Oliver as a psychical researcher that will be of most interest, for it is on this side that I have known him best, and it is the only scientific subject on which I can meet him on something like equal terms, not as regards ability but as regards amount of knowledge. I have given most of my time and energy to these things for about twenty seven years. I must have read well over a thousand psychical books, and my notebooks contain analyses of over five hundred of them. I have done much experimentation, and I have been favoured with exceptional opportunities, for I was able to conduct a series of sittings with one sensitive, which is better than many experiments with different ones. This series lasted about twenty years, I always took verbatim notes, in shorthand, afterwards transcribing them in typescript, adding notes, and making indexes. All this seems like egotistic self advertisement, but the reader has a right to ask for my credentials in order that he may be able to form at least some idea of the value of my opinion. Well, then, what do I think of Sir Oliver and his conclusions, in this matter of psychical research?

My own first hand experience has convinced me that human beings survive the death of the body, and that it is sometimes possible to communicate with them. I therefore agree with Sir Oliver on this main point. I have not been much influenced by his or any other sitter's evidence,

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preferring to be guided by my own observations. But I have been conducted by those observations to the same conclusions as Sir Oliver. It must be borne in mind that those conclusions are not based entirely on evidence obtained through the sensitives who are sometimes called mediums. This is the kind of thing that happens to be most popular, and it is apt to overshadow other kinds of very important evidence. For example, there is a large mass of carefully collected cases, in such books as "Phantasms of the Living," and in the "Proceedings" of the S.P.R., in which mediums are not concerned at all, but in which perfectly normal and sane people have visual or auditory experiences which bring knowledge in some supernormal way, many of these experiences suggesting the agency of discarnate minds. And there are still other experiences which point in the same direction, directly or indirectly. Our conclusions are based on a mass of facts which is much more extensive than is realized by those who have made no special study of the subject.

The material is drawn from human experience, and is subject to human errors. We have to allow for this, even after making the evidence as good as it can be made—making it fit to go to a jury, as Professor Sidgwick used to say. The study of these things accordingly calls for something of the legal habit of mind. Sir Oliver has this; he has a keen eye for what constitutes evidence. He can weigh facts in a dispassionate way, asking himself what hypothesis will best explain them. And when he feels he has enough facts to point the way, he will unhesitatingly adopt that hypothesis; but he is always ready to scrap it on sufficient evidence shown. I suppose this is the attitude of the typical man of science. A physicist or a worker in any branch of science is accustomed to finding new facts, and he usually needs some sort of hypothesis to hold them together—almost anything will do, at first, and he adopts the one that seems on the whole the most satisfactory for present purposes. He is always ready to abandon it and substitute a better one, if anyone will provide it.

In psychical research, accordingly, a man of science does the same thing, and thereby sometimes rather horrifies his co-workers. Some of the leaders of the S P R are scholars such as Lord Balfour, and these have been largely concerned with minute points of grammar, literary form, and so on. They are extremely careful workers, fastidious for accuracy to the very last degree, and in some cases adding a natural conservatism to the caution engendered by their training. These S P R leaders who represent the Sidgwick tradition, have sometimes rather demurred to the ready way in which Sir Oliver as a man of science would adopt an hypothesis. Their tendency is to want to feel quite sure, before saying anything about 'explanations', the tendency of the man of science is to adopt an explanation provisionally, leaving it to the future to revise it or scrap it in favour of something better. Both kinds of mind are useful in a Society such as the S P R., and I think the scientists and the scholars on the Council are able to recognize the virtues of the other members who have had a different training. My own position has perhaps enabled me to see both sides, for I am neither scholar nor scientific man by training. I did indeed work for some of my early years at chemistry and other sciences, and I have perforce been a wide reader, but my training and my environment have been of the business kind. Consequently I stand outside both groups, so to speak, and can see the virtues of both. I see the importance of formulating hypotheses, for it is only by making keys and trying them that we shall know what key will open the locks which we call problems of Nature, but I see also that accuracy and caution are of tremendous importance, for a premature or badly based hypothesis may lead us down a blind alley and may delay real progress.

There is, however, a danger in this seeing of both sides. It may lead to a hesitancy which prevents any sort of advance, to a sort of paralysis of judgment. The true man of science is at least free from this. He makes the plunge, as soon as he feels that he has sufficient basis of fact to justify the adoption of a provisional explanation.

In due time, with the amassing of more and more facts, he may come to think that his explanation is so continually confirmed, and is so entirely unattacked by any facts pointing to alternative explanations, that it may be safely accepted as a truth. Sir Oliver, after many years of study and experiment, came to think of human survival in this way; as a truth which is proved—using that word in the scientific sense rather than in the sense attached to it in formal logic. It cannot be proved in knock-down fashion, so that no alternative is possible; but it is proved in the same way as other scientific beliefs; it explains the facts better, on the whole, than any other explanation. And it is worth emphasizing that Sir Oliver's belief is based on facts, on direct experience, not on theory.¹ In his early days he had gone through a period of complete scepticism; and, after that time, he was full up with his own work. Nor was the belief the result of emotional necessity due to grief in bereavement. He reached full conviction many years before Raymond was killed. This is proved beyond question by his book "The Survival of Man," published in 1909, six years before Raymond's death.

It has been said by critics who have not studied the subject, that Sir Oliver, though unquestionably a great physicist, is unscientific and credulous when he talks about spirits of the departed. It is not so. Sir Oliver has not departed from the methods of science in his psychical research work. Whatever our conclusions may be, they are based on a study of facts; the conclusions may be wrong, but the method is scientific—as scientific as the method of chemistry or geology. Psychical research cannot be attacked on the score of method, unless *all* experimental science is attacked. What *can* be attacked is our scheme of interpretation; the theory, which we build on our facts. Indeed we welcome such attacks, for we are ready to be taught; if we can be given a truer interpretation, we will adopt it. But, before a critic is likely to be able to give us a theory which had

¹ "Past Years," p. 351.

not occurred to us, he will have to study all the recorded facts which have formed the basis of our inductions. It is easy enough to invent theories, but if we invent them on small ground, it is probable that we shall be presented with facts which explode our theory. A wide acquaintance with facts is necessary. This is what we aim at. Our method is completely scientific.

I have said that survival cannot be proved in knock-down fashion. In all sciences which are concerned with making inferences from large collections of facts—inferences which we call the "explanation" of the facts—it is usually possible to make several different inferences in explanation of any group of facts. The Ptolemaic and the Copernican hypotheses were alternative explanations of the movements of the planets, and it may be that telepathy between the living, and communication from the dead, will supply a parallel case. The Copernican theory was gradually adopted, not because it was proved coercively to be true, but because it explained the facts more simply and satisfactorily. And somewhat as the Ptolemaic system had to be made very complicated and difficult—with the epicycles which had to be introduced—so it is becoming more and more difficult to explain all the psychical facts by telepathy between the living. Indeed the hypothesis is beginning to seem quite fantastic and incredible, and the alternative hypothesis of survival and communication is accordingly beginning to seem much the more acceptable of the two.

But those engaged in psychical research are well aware that they must not dogmatize, for in science there is neither coercive proof nor finality. Science moves on; the theories of to-day are replaced by better ones to-morrow, as more and more truth is reached. This applies to our theory of communication from discarnate minds. The facts point that way, and some of us adopt the hypothesis; but we agree that as knowledge grows, this hypothesis may be superseded by a better one. We are quite sure that the facts on which it is based are real facts—that things happen

which are not explicable by orthodox science—but the interpretation may be improved upon. We regard the prospect with complete equanimity, for the history of science shows that when a theory is superseded, the new theory is always greater, more inclusive, more awe-inspiring, than the one that is superseded. This encourages us to look forward with hope and faith, not clinging desperately to an hypothesis, but knowing that there is greater truth on before. Therefore, though we believe in survival of personality and in communication from the departed, we are ready to adopt a truer explanation of the facts, if it can be shown to be such. Sir Oliver would agree with this, I think, but, being a man of science, his mind deals with things as they are, and on their proximate explanation; it is no use wasting time on future theories of which we have yet no glimpse. For the present, the practical good sense of the matter is to accept the explanations which seem truest now.

In religion, Sir Oliver is a member of the Church of England, having been confirmed when in his teens. He had the advantage of coming in contact with broad-minded clergymen, and was not put off by insistence on narrow interpretations of doctrine, or the necessity of their acceptance. Consequently he had no religious difficulty about the new psychic knowledge, which indeed supports the Christian scheme as to its essentials. For it confirms the Christian belief in a spiritual world in which the human spirit continues to exist. F. W. H. Myers has said that in fifty years, our modern evidence will have enabled everyone to believe in the resurrection of Christ, whereas in default of it, in fifty years no one would have believed it. This was an optimistic forecast; but in any case it is certain that the new evidence confirms the old; the appearances of Jesus after his death, and many other narratives in the Bible, are rendered much more credible than they were before the results of modern psychical investigation were published.

But, while I agree as to this, it is on this religious side

that I have been most conscious of differing from Sir Oliver, though the difference is mainly an affair of the difference in our respective environments and the early influences to which we were exposed. I was brought up in a rather narrow sect, the teachings of which sent me off into agnosticism. They seemed to me a libel on God. I could not believe that He would punish anyone for ever, merely for the sins of seventy years or so. Indeed the libel was worse than that, for we were told that mistaken *beliefs* were quite enough to bring about eternal damnation, quite apart from sinful actions. It did not seem to me that belief was entirely under the control of our will, and consequently condemnation for mistaken belief was unreasonable. And if there is a God at all, surely He is a reasonable Being. On the other hand it can be argued that heretics ought to recognize the good that the old fashioned churches do, and the fact that at least some of their teaching is acceptable by almost everyone, and that the heretics ought accordingly to join the Church and work with it, overlooking the points with which they cannot agree.

Sir Oliver fortunately was not driven into any outlawry. The Church was not to him a dictatorial or unfriendly thing. Thus he was well placed, as to view point and emotional orientation, so to speak, when he became the chief reconciler of Science and Religion in later days. He saw the good in both. But I have never quite got over a feeling of annoyance when he uses old theological terms. However, I recognize that he is justified, for in these matters a gradual change is best. One can put new meanings into the old words, or at least modify the old meanings, and this is better than continual new and disturbing inventions. I think that what Sir Oliver means when he says, for instance, "incarnation,"¹ with reference to the central point of Christianity, is something that anyone except a thoroughgoing materialist can accept without sacrifice of

¹ "Reason and Belief," Part I, also "Man and the Universe."

honesty, but to me there is always this feeling of disturbance, because in my youth and in the mouth of our parson, the word meant something different. Well, each of us is the product—in some cases we may say the victim—of his early life to a great extent. We must each struggle free as well as we can, learning to express our own selves and to get what new truth we can. It is fortunate when, as was the case with Sir Oliver, a thinker and writer is not caused waste of time in getting rid of old shackles.

As to Sir Oliver's philosophical position, he has indicated it in his various writings. I think the root of the matter is that he regards Mind as a real thing, not as a property of brain-cells. It is not produced by the brain, though it manifests through it. Consequently Mind may exist without brain, as a musician may exist although he has lost his instrument. Whether Mind does exist without brain, is to be settled by the evidence, so far as science is concerned, though there is much to be said on the purely philosophic side, and on this side the idealistic philosophy is again coming into fashion, after the materialism of the last century. And psychical research does decide, by sheer evidence, that minds do exist without brain. Mind, being independent of brain, there may be many grades of it, up to a Being whom we call God. Minds interact with Matter, but we do not yet in the least understand the interaction, that is for Science to find out. Sir Oliver thinks that the bridge between Mind and Matter may be found in the Ether of Space, as he hints in his book "Beyond Physics." His earlier book, "Life and Matter," may also be read in this connexion.

It is not for me to say much of Sir Oliver as an educationalist, others are better qualified to do that. But it must be obvious enough to anyone that his influence on many thousands of lives must have been enormous, through his work at Liverpool and Birmingham, not to mention his books, which have reached a still wider public. As *Principal of the University of Birmingham* he was in close touch with the teaching of almost all departments of human

knowledge, and he took a special interest in the Workers' Educational Association and other organizations which were concerned with any kind of education.

Finally, on the human side, Sir Oliver has been a good husband and father, and a staunch friend. He is kindly, indeed tender, to the weak or suffering, helpful in any possible way, ready to give of his valuable time if he can lighten the load of suffering borne by a bereaved father or mother. I have no doubt that thousands of such people have blessed him for the comfort he has given them in their hour of sore trouble. He has been a hard and unselfish worker, and, thinking of the whole of his activities and character, I should be tempted to use the word "saintly," if it did not savour of smugness. I think it is the quality of *reverence* in him that partly brings this word to mind; reverence for the majesty of this stupendous universe and the Mind that lies behind it, also reverence for the manifestation of God which Christians regard as having been made in the person of Jesus Christ. But the word in its usual acceptation is not entirely suitable. Sir Oliver is rather too human for it. He can express himself with very human vigour, on occasion, in referring to war, cruelty and the like. He is a man like ourselves, but greater. His interests are exceptionally wide, as his letters show; nothing in the wide universe is quite without interest to him. Throughout the years of his long life, with few and rare intervals for rest or recreation, he has sought the True, the Good, and the Beautiful, and has helped others to see more of these aspects of the Divine. Accordingly he is a true prophet and revealer. Our times are fortunate in having this great soul as leader and teacher; future generations will probably realize this even more vividly than we do.

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